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Missouri Medicine

OURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

ANUARY, 1960

OLUME 57, NUMBER 1

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Sheraton-Jefferson Hotel, St. Louis

IN EPILEPSY... PREREQUISITE FOR PARTICIPATION: THERAPY

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bibliography: (1) Green, J. R., & Steelmon, H. F.: Epileptic Seizures, Baltimare, Willia & Wilkins Company, 1956, p. 136. (2) Bray, P. F.: *Pediatrics* **23**:151, 1959. (3) Davidson, D. Jr., in Conn, H. F.: Current Theropy 1959, Philadelphia, W. B. Saunders Company, 1959, p. 5 (4) Smith, B., & Forster, F. M.: *Neurology* **4**:137, 1954. (5) Zimmerman, F. T.: *New York Med.* **55**:2338, 1955. (6) Lemere, F.: *Northwest Med.* **53**:482, 1954. (7) Perlstein, M. A.: *Pedi Clin. North America:* **4**:1079 (Nov.) 1957. (8) Livingston, S., & Pauli, L.: *Pediatrics* **19**:6 1957. (9) Carter, C. H., & Moley, M. C.: *Neurology* **7**:483, 1957. (10) Keith, H. M., & Rusht J. G.: *Proc. Staff Meet. Mayo Clin.* **33**:105, 1958.

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Missouri Medicine

THE JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Curiosa et Trivia

WILLIAM B. McCUNNIFF

It was bound to happen: Pentagon cafeterias now have two lines . . . the standard version for the hardy souls, and the other serving bland food for employees with ulcers.

Due to blockade and shortage of materials, Confederate physicians boiled their horse-hair sutures to make them more pliable and less likely to break. Inevitable result: accidental asepsis!

Bob Fitzsimmons, one-time heavyweight boxing champion, 170 pounds, nearly six feet tall, wore a size six shoe.

We know you're not in the market, but it is reported that the going price for heroin is currently about $18,000 per ounce . . . or $40.00 per grain.

Capsule Clinics

- Inhibition of carbonic anhydrase in the mature erythrocyte has been utilized by Hilkovitz as a therapeutic measure in treatment of sickle-cell disease. Four adult patients with sickle-cell anemia were studied by the authors. One patient was given Diamox and the others received Cardrase. Observations were made on the immediate and long term effects of the drugs. There was no evidence that either agent was of value. Henderson, A. B., et al., Arch. Int. Med. **104**:68, 1959.
- The activity of Furadantin is directly proportional to the urinary concentration of the drug. Therefore, overhydration should be avoided in Furadantin-treated patients. Optimally, following administration of a 50 mg. dose of the drug, fluid intake should be restricted. Thompson, I. M., and Amar, A. D., J. Urol. **82**:387, 1959.
- Prolonged bed rest and restriction of activity after an acute attack of rheumatic fever is not necessary for optimal healing of the injured heart. Lendrum, B. L., et al., Pediatrics **24**:389, 1959.

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WASHINGTON

WOULD SPEED DISSEMINATION OF INFORMATION

In an attempt to speed dissemination of information on new medical discoveries, the Department of Health, Education and Welfare has appointed a fourteen member advisory committee to the cancer control program to counsel state and local agencies "in developing services to decrease the interval between discovery of new cancer technics and their widespread application."

Members of the advisory committee are from the fields of surgery, pathology, radiology, preventive medicine and general practice from all over the country.

Another interest of the Department is in speeding development of a fluorescent antibody technic, developed some twenty years ago and recently tested by the public health service in cooperation with state health services in Tennessee, North Dakota, Colorado, Illinois and Maryland. It would aid in diagnosis of streptococcal infections and rabies.

EDUCATION AND MEDICAL CARE GROUPED

Education and medical care were grouped together by two research specialists in a report to Congress recently. Their reports were part of the Senate-House economic committee's year-long study of policies to promote growth, price stability and maximum employment in the economy.

The education report was done by Werner Z. Hirsch, professor of economics at Washington University. The presentation on medical costs was by Markley Roberts who is doing graduate work at the American University in Washington, D. C. He said "Federal support and leadership is essential for cooperative action by states, communities and private groups to insure adequacy in the supply of medical care." He said aid from Washington is particularly important in construction of hospitals and medical schools, aiding needy medical students, and of health insurance for elderly citizens.

FORAND-TYPE LEGISLATION

In this connection, it is predicted that both the President and the Secretary of Health, Education and Welfare may have changed their attitudes toward Forand-type legislation, if not the Forand bill itself. In a news conference on the report of the Federal Council on Aging, of which Dr. Fleming is chairman, medico-economic problems of the aged was stressed. Under questioning, Dr. Fleming said that the Forand bill was intended to fill a need that exists and that his own staff has failed to develop an alternative solution.

MEDICAL EXPENSE CONTINUES RISE

And at the same time medical expense continues its climb, being estimated at $25 billion a year, or approximately 5 per cent of gross national product. A report from the Joint Congressional Economic Committee, of which Senator Paul H. Douglas (D., Ill.) is chairman, says that the demand for good services is far greater than the supply and that the inflationary spiral will continue.

The committee report further indicates that the feeling is that there will be eventual fulfillment of the need for enlarged federal and state governmental participation in better medical care for a greater number of persons.

COUNCIL ON AGING REPORTS

A recently published report of the Federal Council on Aging gives, among others, the following points: "The foremost need in public assistance is a monthly payment sufficient in amount to cover the costs essential to living and to include the special needs (including medical) of older persons. . . . Efforts to improve the care of older persons in nursing and convalescent homes must take into account the cost of adequate care. There is growing concern over the problems of older people with low incomes in paying for modern medical care. . . . Compulsory hospitalization insurance for beneficiaries of the old age, survivors and disability insurance program has been proposed. On the other hand, the coverage of voluntary plans has been consistently increasing. The Council endorses further study by the Social Security Administration of ways of encouraging the development of coverage under voluntary plans and such ways to supplement these plans as may be found practicable and desirable."

CONGRESS BEGINS SESSION

Soon after the first of the year, the Congress will reconvene. The necessity of alertness of physicians to legislative bills and trends and the need for physicians to take an active part as citizens in politics, public affairs and community life was stressed by Dr. Louis M. Orr in his presidential address at the Clinical Session of the A.M.A. (Address appears on page 42.)

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Across
Missouri

Health Departments Report

Cities in Missouri are compiling their reports on public health and welfare for the last year and establishing plans for the coming year. The Springfield-Greene County Health Department has issued a comprehensive survey of "Accomplishments 1958-1959" and "Health Plan 1959-1960." The budget for the Springfield-Greene County department for 1959 was $430,077, with the assessed valuation of the county placed at $159,990,486. Reports are given on the Division of Public Health Nursing, Division of General Sanitation, Public Health Laboratory, County Sanitation, Division of Veterinary Services, Division of Medical Care and Preventive Medicine. The major problems in public health are listed as aging, respiratory diseases as related to aid contamination, accidents, mental health, dental health and waste disposal.

The City Health Department of Columbia reported that the infant death rate in that city for 1958 dropped sharply below that for 1957, and was 50 per cent below the average figure for the entire state. The rate last year was 12.6 per 1,000 live births, with the over-all figure for Missouri given as 26.4 deaths per 1,000 live births. In 1957 the infant death rate in Columbia was 17 per 1,000. The department shows that while infant deaths decreased, deaths from cancer and heart disease increased. The report reviews that there have been no deaths of mothers in childbirth for 10 years in the city. The budget for the department was $50,000.

River Transportation Increases

It is reported that more than 800,000 tons of barge freight navigated the Missouri River through the state last year. The previous record was 585,000 tons. *The Kansas City Star* points out that along the Mississippi and Ohio rivers barge service has been responsible for major industrial growth and expresses the hope that this will be true in Missouri with improved navigation on the Missouri River. The editorial says "We aren't assuming that the Missouri River can attract industry on the scale of the Mississippi but you can still see tremendous possibilities. Whether anything comes from them depends largely on the aggressiveness of the cities and business interests of the Missouri Valley."

Welfare Costs Decline

Only state aid for the permanently and totally disabled showed an increase in cost in October. Aid for dependent children and the aged both continued to decline, the State Division of Welfare reports.

The cost of aid to the disabled rose $1,418 to a total of $950,216, as seven persons were added to the rolls, making a total of 15,582 persons. The average check was for $60.98, up an average of 6 cents from September.

Old age assistance cost declined $4,983, to $6,980,961, as 88 persons were dropped making the rolls total 118,327 persons. The average check was for $59, up 9 cents from the previous month.

Cost of payments to dependent children and their mothers decreased $6,572 as 268 persons were dropped to make the rolls total 88,658. Average check for October was $26.39, up 1 cent from the previous month.

Missourians Reading More

The habit of reading seems to be growing in Missouri, possibly the result of the increase in public school pupils. During the year ending June 30, the number of books circulated by public libraries in the state numbered 17,780,537. This is an increase of 2,752,748 in a two year period.

Hill-Burton Status

The Department of Health, Education and Welfare reports that as of October 31 the status of all Hill-Burton grants for Missouri show completed and in operation 49 projects at a total cost of $56,974,905, including federal contribution of $21,412,417. There are 36 projects under construction at a cost of $30,339,158, including federal contribution of $9,671,781 and designed to supply 944 additional beds. Approved but not as yet under construction are two projects at a total cost of $1,476,422, including $648,982 federal contribution and designed to supply 60 additional beds.

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i-inflammatory and antiallergic levels ARISTOCORT means:

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is: rheumatoid arthritis; arthritis; respiratory allergies; allergic and inflammatory
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ns: With ARISTOCORT all traditional precautions to corticosteroid therapy should be ob-
osage should always be carefully adjusted to the smallest amount which will suppress
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Scored tablets of 1 mg. (yellow); 2 mg. (pink); 4 mg. (white); 16 mg. (white).
Parenteral (for intra-articular and intrasynovial injection). Vials of 5 cc. (25 mg./cc.).

References: 1. Feinberg, S.M., Feinberg, A.R., and Fisherman, E.W.: *J.A.M.A.* 167:58 (May 3) 1958. 2. Epstein, J.I. and Sherwood, H.: *Connecticut Med.* 22:822 (Dec.) 1958. 3. Friedlaender, S. and Friedlaender, A.S.: *Antibiotic Med. & Clin. Ther.* 5:315 (May) 1958. 4. Segal, M.S. and Duvenci, J.: *Bull. Tufts North East M. Center* 4:71 (April-June) 1958. 5. Segal, M.S.: Report to the A.M.A. Council on Drugs, *J.A.M.A.* 169:1063 (March 7) 1958. 6. Sherwood, H. and Cooke, R.A.: *J. Allergy* 28:97 (Mar.) 1958. 7. Duke, C.J. and Oviedo, R.: *Antibiotic Med. & Clin. Ther.* 5:710 (Dec.) 1958. 8. McGavack, T.H.: *Clin. Med.* (June) 1958. 9. Freyberg, R.H.; Berntsen, C.A., and Hellman, L.: *Arthritis and Rheumatism* 1:215 (June) 1958. 10. Hartung, E.F.: *J.A.M.A.* 167:973 (June 21) 1958. 11. Hartung, E.F.: *J. Florida Acad. Gen. Pract.* 8:18, 1958. 12. Zuckner, J.; Ramsey, R.H.; Caciolo, C., and Gantner, G.E.: *Ann. Rheum. Dis.* 17:398 (Dec.) 1958. 13. Appel, B.; Tye, M.J., and Leibsohn, E.: *Antibiotic Med. & Clin. Ther.* 5:716 (Dec.) 1958. 14. Kalz, F.: *Canad. M.A.J.* 79:400 (Sept.) 1958. 15. Mullins, J.F., and Wilson, C.J.: *Texas State J. Med.* 54:648 (Sept.) 1958. 16. Shelley, W.B.; Harun, J.S., and Pillsbury, D.M.: *J.A.M.A.* 167:959 (June 21) 1958. 17. DuBois, E.F.: *J.A.M.A.* 167:1590 (July 26) 1958. 18. McGavack, T.H.; Kao, K.T.; Leake, D.A.; Bauer, H.G., and Berger, H.E.: *Am. J. Med. Sc.* 236:720 (Dec.) 1958. 19. Council on Drugs: *J.A.M.A.* 169:257 (Jan. 17) 1959. 20. Rein, C.R.; Fleischmajer, R., and Rosenthal, A.R.: *J.A.M.A.* 165:1821 (Dec. 7) 1957.

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JOHN F. PEARL, M.D.

Missouri Academy of General Practice

It was gratifying to note the good attendance and interest shown at the scientific sessions held during the 11th Annual Assembly of the Missouri Academy of General Practice at the Chase Hotel in St. Louis on November 7-8.

The four symposiums and panel discussions following were of a high quality and presented interesting, practical information for all of those fortunate enough to be present.

Dr. McCraw moderated a panel discussion.

Attendance at sessions was excellent.

Among new officers elected were Drs. Trolinger, Leitch, Cohen, Eversoll, Pearse and Pearl.

Drs. Metz and Allen substituted for Drs. Hall and Siegel who were absent because of illness.

Dr. Allen presented the plaque to Senator Noble.

Some 325 physicians were registered at the assembly this year. New officers elected at the annual business session for the insuing year were: President-Elect, Cecil G. Leitch, M.D., Blue Springs; Vice President, Charles Metz, M.D., St. Louis; Delegates to the AAGP, Norton Eversoll, M.D., St. Louis, and J. H. Trolinger, M.D., Jackson. Alternate Delegates, Charles Metz, M.D., St. Louis, and Roy Pearse, M.D., Nevada. Members of the Board of Directors for a three year term: G. Donald Shull, M.D., Jefferson City; Walter C. Gray, M.D., St. Louis, and

(Continued on page 54)

they help the cough remove its cause

These elegant antitussives comprise a group of significantly superior expectorants from which you may select the formula best suited for your coughing patient.

First of all, they have more in common than mere delectability to eye and palate: they all include *glyceryl guaiacolate*. This remarkable expectorant aids the coughing mechanism by increasing the secretion of Respiratory Tract Fluid,[1] which helps liquefy sputum,[1,3] makes bronchial and tracheal cilia more efficient,[1,2] and acts as a demulcent.[1,3-5] Through its effects, all four expectorants promote the natural purpose of the cough, which is to remove the irritants that cause it.[1,2]

In addition, the Robins antitussive armamentarium provides a choice of widely accepted drugs in various combinations with glyceryl guaiacolate for treating different kinds of coughs and associated symptoms. For antihistaminic effects, there is Dimetane® or prophenpyridamine; for bronchodilation and nasal decongestion, there are sympathomimetic agents; and for suppression of the "too frequent" cough, there is codeine or dihydrocodeinone.

Robitussin®

Each teaspoonful contains:

Glyceryl guaiacolate	100 mg.

Robitussin® A-C

Each teaspoonful contains:

Glyceryl guaiacolate	100 mg.
Prophenpyridamine maleate	7.5 mg.
Codeine phosphate	10 mg.

(exempt narcotic)

Dimetane® Expectorant

Each teaspoonful contains:

Parabromdylamine maleate (DIMETANE)	2 mg.
Glyceryl guaiacolate	100 mg.
Phenylephrine HCl, USP	5 mg.
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Dimetane® Expectorant-DC

Each teaspoonful contains the Dimetane Expectorant formula *plus* Dihydrocodeinone bitartrate, NF .... 1.8 mg.

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References: 1. Cass, L. J., and Frederik, W. S.: Am. Pract. & Digest Treat. *2*:844, 1951. 2. Blanchard, K., and Ford, R. A.: Journal-Lancet *74*:443, 1954. 3. Hayes, E. W., and Jacobs, L. S.: Dis. Chest *30*:441, 1956. 4. Blanchard, K., and Ford, R. A.: Rocky Mountain M. J., Vol. 52, No. 3, 1955. 5. Boyd, E. M., and Pearson: Am. J. M. Sc. *211*:602, 1946.

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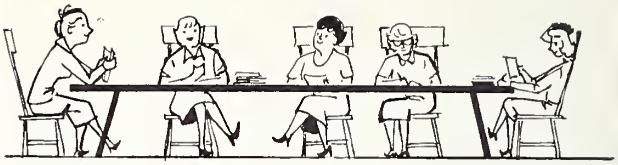
Woman's Auxiliary



Surely in someone's repertoire of anecdotes there must be "one about the traveling salesman" which would apply to my activities during the months of October and November. For I have indeed been traveling, by plane, car and bus, "selling" membership in the Auxiliary and "promoting" Auxiliary activities.

Mrs. Stanley S. Peterson

It has been an interesting experience, tiring at times, of course, but rewarding in that I have come away from each meeting knowing that at least one or two members have gained the very piece of information or source of reference they have needed for a program or speech or project. The many new friendships have been rewarding, too, along with the feeling that for a few minutes a group of us have shared the realization of what the Auxiliary is doing throughout the country, as well as in our own state and counties.

Following the lead of Districts 1, 3 and 4, which held district meetings in St. Joseph and St. Louis in October, Mrs. C. M. Lederer, of Warrensburg, Director of District 6, and Mrs. James C. Cope of Columbia, Director of District 5, planned district meetings in Sedalia and Columbia on November 18 and 19. Both meetings were held in connection with district meetings of the Missouri State Medical Association, and Auxiliary members enjoyed a pleasant social hour and dinner with the doctors before adjourning for separate meetings. Both meetings were well attended, with representatives from most of the constituent county auxiliaries, and a number of members-at-large. Completing the evening in Columbia was an organ recital in the unusually beautiful new chapel at Stephens College.

In addition to meeting with the district groups, it has been a pleasure to attend a luncheon meeting of the Lafayette-Ray Auxiliary, of which our president-elect, Mrs. Jordan Kelling, of Waverly, is a member. Dr. Peterson and I were guests of the Ozark Medical Society and Auxiliary in Aurora on November 10. For their program that evening, the Auxiliary viewed the film from A.M.A., "The Medicine Man."

Earlier in the month I enjoyed having "chuck wagon lunch" with members of the Jackson County Auxiliary at the new Western Hills Motel. It was delightful to see so many familiar faces in the group, and to discuss "What's New From National" with them.

The Conference on Aging, sponsored by the A.M.A., and held in Kansas City November 16-17, was well attended by Auxiliary members, not only from Missouri, but also from Kansas, Nebraska, Oklahoma, Illinois; also attending was the state president from New Mexico, who represented the National Auxiliary. It was encouraging to learn how much has already been done by communities in these states toward solving some of the health problems of the aging.

I was fortunate to be in Springfield on the day when the Greene County Auxiliary met. Following the October luncheon we stuffed envelopes with Christmas Seals for the Tuberculosis Association as a community service project. At the November luncheon, mothers of doctors were honored guests for an interesting program.

As we reach the turn of the year, we look forward to the completion of programs and projects planned during the fall, and to the coming convention where our accomplishments will be reviewed and evaluated. During January our efforts to enroll members in the Auxiliary will be redoubled. To attain our goal—"every doctor's wife an Auxiliary member"—we need the doctors' approval, support and encouragement. We hope every doctor will remind his wife, "Have you joined the Auxiliary?"

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Missouri Medicine

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CHARLES SHAGASS, M.D., *Iowa City, Iowa*

Depression

Problems in the Classification and Treatment

Studies of sedative thresholds and therapeutic response to a new antidepressant drug are presented in relation to the classification of depressions from a treatment point of view.

Dr. Shagass is Associate Professor of Psychiatry at the Psychiatric Hospital of the State University of Iowa in Iowa City. The paper was presented at the annual meeting of the Mid-Continent Psychiatric Association held in St. Louis on September 20, 1959.

In the unsatisfactory realm of psychiatric diagnostic classification, the position of the depressive syndromes has seemed relatively favorable. Their nomenclature did not change appreciably in the new American Psychiatric Association classification,[1] and one might assume that the classification of depressions was a relatively settled matter. The extent to which this assumption would be unwarranted is indicated by the proceedings of the recent McGill University Conference on Depression and Allied States.[2] At that conference the issue of classifying depressions was considered by many eminent psychiatrists, who agreed only that a secure basis for classification is not yet available. Such a conclusion would seem inevitable in the absence of methods for proving etiologic factors in the individual case. Until such methods are available, and if one accepts D. Ewen Cameron's premise that "the diagnosis is a design for action,"[3] there is much logic in classifying depressions according to indications for treatment. Such a view was proposed by William Sargant at the McGill Conference.[4]

Until recently a treatment-based diagnostic scheme would have meant, mainly, the differentiation of cases favorable for electrotherapy from those not likely to benefit from this treatment. However, with the introduction of potent drugs for the treatment of depression, starting with iproniazid, and now apparently leading to a host of new agents, the problem has become more complicated. As each new drug is introduced, its special indications will have to be learned if indeed it has any. It seems worthwhile, then, to examine current ways of classifying depressions in relation to treatment, in order to see if any useful guiding principles may be available. Data which seemed relevant to this purpose were obtained by two rather different approaches to the investigation of depressive syndromes in which I have been engaged. The purpose of this paper is to present some of the material obtained in these studies.

Studies of Sedative Thresholds in Psychiatric Patients

I should like first to describe some studies involving a neuropharmacologic determination which I have called "the sedation threshold."[5] Lehmann has recently included this in a list of approaches to the differential diagnosis of pathologic depression which is reproduced in table 1.[6] In this list one finds the phenomenologic, etiologic, pre-morbid personality, and the natural history approaches which form the basis of the

TABLE I

APPROACHES TO DIFFERENTIAL DIAGNOSIS OF PATHOLOGIC DEPRESSION (AFTER LEHMANN[6])

1. The phenomenologic approach (the presence of retardation or agitation, of diurnal fluctuations, hypochondriasis, self-blame).
2. The etiologic approach (psychogenic or endogenous).
3. The somatotypologic approach (pyknic or mesomorphic vs. other somatotypes).
4. The consideration of the premorbid personality (outgoing plastic vs. restrained rigid personality structure).
5. The evaluation of the natural history of the disease (duration and periodicity).
6. The impairment of certain autonomic functions (parotid secretion).
7. The study of neuropharmacologic response patterns (sedation threshold).

usual psychiatric examination. Also listed are the somatotypologic and autonomic functioning approaches.

The sedation threshold was originally developed to measure the intensity of pathologic anxiety. The idea for it arose when, as a psychiatric resident, I was called to quieten excited and tense patients. I noticed that my decision to order a 250 or 500 mg. ampoule of sodium amytal for intravenous injection was based upon some appraisal of the extent of tension in the patient. Being then interested in the measurement of anxiety, it occurred to me that if one had a particular sedative end point, one could give the drug at a constant rate, determine how much was required to reach this end point, and possibly use this determination as a measure of anxiety. Fortunately there seemed to be an end point in the EEG.

Figure 1 illustrates the basis of the sedation threshold procedure. Sodium amytal is injected intravenously at the rate of 0.5 mg./kg. every 40 seconds. The amytal consistently produces an increase in the amount of fast activity recorded from the frontal EEG. If one measures the amplitude of this activity, a sigmoid curve is usually obtained. This curve contains a point of inflection, preceding which there is a sharp rise in the amplitude of fast activity and following which the rate of rise decreases. The sedation threshold is the amount of sodium amytal, in mg./kg., required to reach this EEG point. It may be mentioned that not all curves are as clear as the one in figure 1; however, most contain an identifiable inflection point. This level of sedation corresponds roughly to the amount of drug required to produce clinically evident slurred speech, and also nystagmus to lateral gaze.

The first patients studied with this procedure were mainly neurotics. In these patients I found that those with severe anxiety, as in the anxiety reactions, regularly had high sedation thresholds. On the other hand, when anxiety was not severe, as in patients with conversion reactions, thresholds were nearly always low; they were approximately the same as those of normal control subjects. From these initial results, it seemed as though the sedation threshold could be considered as a measure of degree of tension or manifest anxiety. However, as soon as I began to apply the threshold determination to the study of psychotic patients, it became apparent that the same formulation did not apply in the psychoses.

One observation was that thresholds were low in acute schizophrenic patients who seemed extremely anxious, whereas they were, on the average, quite high in chronic schizophrenic patients, many of whom showed little manifest anxiety.

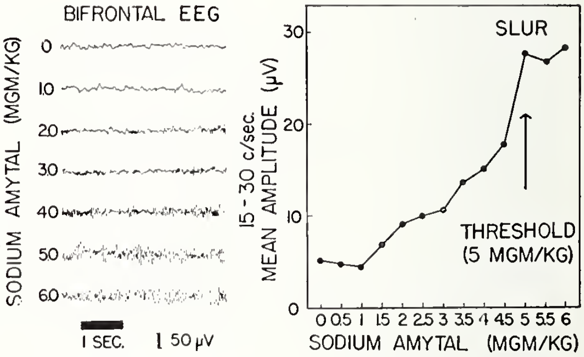

Fig. 1. Left hand side shows effect of sodium amytal on EEG. Graph shows changes in amplitude of frontal fast frequency. Arrow points to inflection point in the curve which indicates sedation threshold.

Even more striking were the results in the depressive psychoses. Agitated patients, who might have been expected to have high thresholds because of a high level of apparent tension, nevertheless gave uniformly low thresholds. Their thresholds were exactly the same as those of patients with retarded depressions. In fact all of the depressions regarded as psychotic (manic-depressive, depressed; involutional depression; psychotic depressive reaction), displayed thresholds within the normal range. On the other hand, patients with neurotic depressions or anxiety states had high thresholds. It then seemed possible to use the sedation threshold to differentiate between these two groups of patients.[7]

Figure 2 shows the distributions of sedation thresholds in all patients diagnosed as having a neurotic or a psychotic depression in a group of 750 consecutively tested patients.[8] It is evident that the distributions barely overlap and that, as far as the sedation threshold is concerned, one was dealing with two distinct populations. Now patients with neurotic depressions have about the same sedation thresholds as patients with anxiety states. They are also clinically similar, with rigid, obsessional personalities and histories of chronic anxiety. When one considers that the sedation thresholds of the patients with psychotic depression are actually within the normal range, it seems reasonable to assume that the high thresholds in neurotic depressions are determined by a high level of anxiety. Furthermore, it would seem that the apparent anxiety in agitated depressions, just as in acute schizophrenias, must be neurophysiologically different from that seen in the neuroses as it does not affect the sedation threshold. The sedation threshold findings in the psychoses have been formulated in terms of ego function impairment; the more impairment, the lower the threshold. The results in patients with organic psychoses, who have the lowest thresholds of any group and certainly the greatest impairment of ego function, supported this formulation.[5]

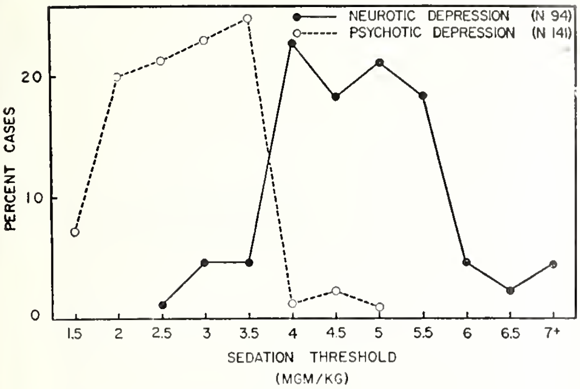

Fig. 2. Percentage distributions of sedation thresholds in patients with neurotic and psychotic depression.

As a corollary of the differentiation between types of depression by the sedation threshold, one would expect the threshold to be related to response to electroconvulsive therapy. It is well known that the psychotic types of depression respond better to electroconvulsive therapy than the neurotic depressions. The nature of the setup did not permit carrying out any long term follow-up study on the results of electroconvulsive therapy. However, we were able to assess the results in terms of the patient's condition, as evaluated by the treating physician, at the time of discharge from the hospital. Table 2 shows the results of one such study. Improvement was graded as marked, moderate, slight or none, marked being the equivalent of a remission. The second column of this table shows the percentage of cases in each of the diagnostic groups who received four or more electroconvulsive therapies. As one might expect, patients diagnosed as having neurotic depression and anxiety state received electroconvulsive therapy much less often than patients diagnosed as psychotic depressions. It would seem then that the decision to use electroconvulsive therapy was closely related to the diagnostic decision. It may be stated that these data were obtained before the sedation threshold came into general clinical use at the institution. Table 2 also shows the percentages of improvement with electroconvulsive therapy in each of the groups. As expected, the psychotic groups were helped more frequently. In these patients the sedation threshold was significantly related to therapeutic outcome with electroconvulsive therapy; the patients with lower thresholds responded more favorably.

TABLE 2

SHORT-TERM RESULTS OF E.C.T. BY DIAGNOSTIC CLASSIFICATION

			*Per Cent Improved***		
Diagnosis	*No. Cases*	*Per Cent Treated**	MARKED	MODERATE	SLIGHT OR NONE
Psychotic Depression	76	95	87	8	5
Neurotic Depression	47	32	15	39	46
Anxiety State	42	12	0	40	60

* Patients receiving 4 E.C.T.'s or more.
** Per cent of those treated.

Additional studies of the relationship between the pretreatment sedation threshold and the response to electroconvulsive therapy yielded the data shown in fig. 3. These results provided definite verification of the conclusion that the lower the threshold, the better the response to electroconvulsive therapy in depression.

Because of these relationships, the sedation threshold came into extensive use at the Allan Memorial Institute in Montreal as an aid in dif-

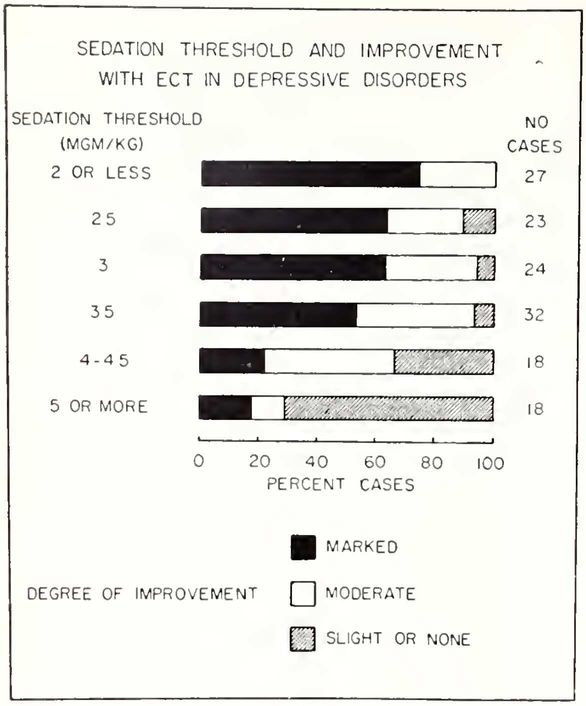

Fig. 3. Relationship between sedation threshold and short-term effect of electroconvulsive therapy in patients with depressive disorders.

ferential diagnosis of depression. It has served this purpose remarkably well and one of the clinicans at the Institute, Dr. V. A. Kral, has recently published a paper describing what he calls "masked" depression in middle aged men, in which the clue to successful electroconvulsive therapy in a series of such cases was obtained from the use of the sedation threshold.[9] It is apparent, however, that the measurement of the EEG is not a simple procedure and there has been some effort made to determine thresholds by the use of a simple clinical sign.

One such procedure I have called the "sleep" threshold.[10] As the sign of the threshold, one uses the amount of amytal required to reach unresponsiveness to verbal stimulation. The "sleep" threshold is correlated with the EEG measured sedation threshold, but is not exactly the same. In two studies it provided rather good differentiation between neurotic and psychotic depressions.[10, 11] However, it seems subject to greater variability than the EEG threshold. Two other possible threshold signs are slurred speech and nystagmus to lateral gaze. Slurred speech has been found too unreliable to be of any use. Fink's study suggests that nystagmus to lateral gaze may be a useful indicator,[12] and we are currently exploring it.

STUDIES OF IMIPRAMINE

The second set of data which I wish to present come from observations of the clinical effects of one of the new antidepressant drugs, imipramine hydrochloride (Tofranil). As this study has not yet been completed and still lacks many controls, present results may be regarded as preliminary. However, they seem worth reporting in this context.

At the time of abstracting case records, imipramine had been given to 73 in and out-patients at the Psychopathic Hospital in Iowa City. Of these, 38 were men and 35 were women. Ages ranged from 24 to 75, with a median of 48.6 years. About half of the patients were treated solely in the clinic, while most of the others had both in and out-patient treatment. For 47 patients, the period of observation after initiating treatment was at least 30 days and averaged about two months, with 11 patients being followed four months or more. Eleven patients had been followed for from 15 to 29 days, and in 15 cases the period of observation was two weeks or less. Sixty-six cases were diagnosed as depressive syndromes; of these 18 were neurotic depressions.

Dosages of imipramine were relatively conservative. In 56 cases the maximum dose ranged from 100 to 150 mg. per day. Only one patient received more than 200 mg. per day. Because it has been suggested that imipramine may be synergistic with electroconvulsive therapy, 14 patients were given the drug simultaneously with electroconvulsive therapy. Also, because experience elsewhere had indicated that increased tension is the most frequent side-effect of imipramine, sodium amytal was frequently given together with it in doses of 60 mg. t.i.d. Altogether, 43 patients received amytal.

Improvement was judged in terms of the diminution or disappearance of the classical symptoms of depression, including mood, appetite, sleep, motor retardation or agitation. Improvement was graded from zero to three plus. Three plus indicated disappearance of all symptoms, two plus a major improvement, but with symptoms remaining, one plus only slight improvement, and zero signified no improvement at all.

The most reliable data on improvement would naturally come from patients observed longest. Table 3 shows that the percentage of significant improvement increased with the period of observation. It would seem that the drug should be given for four weeks to allow it a fair trial. Many factors may govern a briefer trial; important ones

TABLE 3

RELATION OF IMPROVEMENT TO PERIOD OF OBSERVATION

	Improvement		
Days Observed	0, +	++, +++	NO INFORMATION
Less than 15	7	2 (22%)	6
15-29	5	6 (55%)	
30 or more	9	38 (81%)	
Total	21	46 (69%)	

would be the patient's ability to tolerate side-effects and the doctor's patience.

Tables 4 and 5 show that amytal was more frequently given in patients observed over a longer period and that there was somewhat more improvement in the patients given amytal. A number of patients experienced improvement in mood and other depressive symptoms, but complained bitterly of restlessness, tension and irritability before amytal was added. Such tensional symptoms represented the most common side effect; they were mentioned by 27 of the 44 patients who reported side effects. Most reported control of these symptoms when amytal was added, and the incidence of tensional complaints would probably have been higher had amytal not been prescribed for many patients at the start of treatment. Many other side effects were reported; however, their incidence in the present series cannot be taken as accurate, but should be regarded as minimal. These, together with incidence, were: dizziness, eight cases; sweating, seven; constipation, six; dryness of mouth, six; nausea, four; retardation of urination, three; headache, three; drowsiness, three; blurred vision, two; palpitation, two; decreased libido, two; urinary frequency, one; dysphagia, one; flushing, one; chills, one. Control of side effects was often achieved by reducing imipramine dosage, as well as by adding sodium amytal.

TABLE 4

RELATION OF AMYTAL USE TO PERIOD OF OBSERVATION (ALL CASES)

Days Observed	*Amytal*	*No Amytal*
Less than 15	7 (47%)	8
15-29	4 (36%)	7
30 or more	32 (68%)	15

Table 6 demonstrates that when electroconvulsive therapy was combined with drug treatment, the percentage of improvement was somewhat higher. The most striking results with electroconvulsive therapy occurred in a group of eight out-patients who required a total of 23 treatments to bring about remission. This average of less than three treatments is less than half of the mean number given to six in-patients who received a total of 40 treatments. The difference may be due to variations in the responsiveness of the cases, but is also seems possible that an important factor may have been the doctor's greater willingness to stop electroconvulsive therapy and allow the drug to take over in out-patients.

TABLE 5

RELATIONSHIP OF AMYTAL USE TO IMPROVEMENT IN PATIENTS OBSERVED 15 DAYS OR MORE

	Improvement	
	0, +	++, +++
Amytal	7	29 (81%)
No Amytal	7	15 (68%)

Table 7 shows the relation of diagnosis to improvement in the 47 cases observed for at least 30 days. Cases with and without electroconvulsive therapy were combined in this table; they differed only in a greater tendency to three plus improvement in the manic-depressives given electroconvulsive therapy with the drug. The total percentage of significant improvements was impressive. Only 4 per cent showed no change, 15 per cent showed slight improvement, 32 per cent showed two plus improvement, and 49 per cent were fully remitted. Results were somewhat better in the psychotic than in the neurotic depressions. It should perhaps again be emphasized that by improvement I refer here to suppression of symptoms. One can make no statements about alteration of underlying processes.

TABLE 6

RELATION OF E.C.T. TO IMPROVEMENT IN 47 PATIENTS OBSERVED 30 OR MORE DAYS

	Improvement				
	0	+	++	+++	*Total*
With E.C.T.	0	1	3	7	11
No E.C.T.	2	6	12	16	36

	0, +	++, +++
With E.C.T.	1	10 (91%)
No E.C.T.	8	28 (77%)

Most new treatments are given a trial in cases not responding to established therapy. Many cases in the group were treated for this reason. Table 8 shows the previous treatment for the present attack in the 47 patients observed for 30 days or more. Twelve had had at least four electroconvulsive therapies and nine had been treated for 18 days to one year with dexedrine or benzedrine, usually combined with amytal. All of these responded well to imipramine. In our out-patient department an attempt was made to place alternate cases of depression on imipramine and on a compound combining dexedrine with amytal (Dexamyl). A preliminary survey of results showed that more patients than intended had received imipramine. However, at the time of survey, only two of 11 patients receiving Dexamyl had shown any improvement, compared with 16 of 20 receiving imipramine. There thus seems little doubt but that imipramine is superior to the amphetamines for treatment of depression and that it helps certain cases in which electroconvulsive therapy has not been effective. On the other hand, eight patients in our series of 73, of whom seven were in the brief observation group, received electroconvulsive therapy subsequent to imipramine with considerable benefit.

TABLE 7

DIAGNOSIS VS. IMPROVEMENT IN 47 PATIENTS OBSERVED 30 DAYS OR MORE

	Improvement				PER CENT
Diagnosis	0	+	++	+++	++, +++
Manic-depressive	0	0	8	7	100
Involutional	0	2	1	3	67
Psychotic Depressive Reaction	0	0	3	4	100
Neurotic Depression	1	4	3	9	71
Other	1	1	0	0	0
Per Cent of Total	4	15	32	49	81

	0, +	++, +++
Psychotic Depression	2	26 (93%)
Neurotic Depression	5	12 (71%)

TABLE 8

PREVIOUS TREATMENT FOR PRESENT ATTACK IN PATIENTS OBSERVED FOR 30 DAYS OR MORE

	Present Improvement	
Previous Treatments	0, +	++, +++
None	6	14
At least 4 E.C.T.	0	12
Dexedrine, Benzedrine	0	9
Sedatives, Tranquilizers, Psychotherapy	3	3

It should be noted that, even when a full remission is obtained with imipramine, relapse may occur shortly after withdrawal of the drug. For this season we have followed a policy of gradual reduction of dosage over several weeks, with increase of dose at the first sign of return of symptoms.

Therapeutic results with imipramine are similar to those reported by many other investigators.[2] The percentage of improvements is somewhat higher than the average compiled by the manufacturers of imipramine (Geigy[13]) for 1,218 cases reported by 40 workers. If this difference is not fortuitous it may perhaps be attributed to greater control of side-effects by sedation in the present study. The striking finding in the Geigy data was the relatively uniform effect of imipramine in all types of depression. Even though there was a higher incidence of success in the psychotic depressions, we were favorably impressed by results in neurotic depressions as these cases are ordinarily not suitable candidates for electroconvulsive therapy (table 2) and frequently present great difficulties in psychotherapeutic management when their symptoms are not effectively controlled.

DISCUSSION

Turning now to the implications of these studies for the management of depressive syndromes, one major conclusion seems important. This is that the successful treatment of depression is closely linked with the correct evaluation and management of anxiety present in the original syndrome or the anxiety induced by treatment. The sedation threshold findings indicate that a high level of neurotic anxiety is associated with an unfavorable prognosis with electroconvulsive therapy. Also it is well known that electroconvulsive therapy tends to accentuate anxiety or induce it after several treatments.[14] A common response of neurotic depressions to electroconvulsive therapy consists of relief of depressive symptoms with relapse in one to two weeks after treatments are stopped. These patients nearly always express great fear of the treatments, no matter how modified. The view that, in these cases, depression is secondary to anxiety, is supported by their response to electroconvulsive therapy. As depression is reduced by electroconvulsive therapy, anxiety mounts and there is a quick recurrence of depression. This chain of events may be altered by using imipramine to shorten the course of electroconvulsive therapy and amytal to control anxiety. One case in our series may be cited as an example.

The patient was a chronically anxious individual who had become involved in a trivial extramarital relationship and was afraid of being discovered by his wife. Partially because of his guilt he embarked on a home renovating program which taxed his financial resources and energy. He became more depressed and finally sought medical help. He was seen in psychotherapy for seven months, with much effort devoted by the therapist to persuading him to have electroconvulsive therapy. Although he managed to keep working, his efficiency was rapidly diminishing and he finally consented. He was referred to our private out-patient clinic. We placed him on imipramine and amytal on the day of the first treatment. He showed considerable improvement after the second electroconvulsive therapy and was close to remission after the third. Electroconvulsive therapy was then stopped and he was able to return to work on imipramine in two weeks, seemed fully remitted after about six weeks, and stopped the drug after eight weeks. In this case we were able to give the patient the benefit of quick relief of symptoms with, but could stop electroconvulsive therapy before he developed memory deficit or marked accentuation of anxiety.

The ability to control depressive symptoms without inducing memory deficit makes combined somatotherapy and psychotherapy more feasible. Furthermore, the psychotherapy thus made possible may also serve the adjunctive purpose of controlling anxiety.

In conclusion, I shall try to summarize what seems a reasonable current position in classifying cases of depression from a treatment point of view. Patients with psychotic types of depression, whether manic-depressive, involutional or psychotic depressive reactions, may be treated either by electroconvulsive therapy, imipramine or a similarly potent drug, or a combination of both. Depending upon the situation, e.g., degree of suicidal risk, whether the patient is hospitalized or not, how far he lives from the treatment center, possible organic disabilities, one or other approach may seem more sharply indicated. If electroconvulsive therapy is used and relapse occurs, a serious trial with the drug and institution of maintenance therapy seems warranted. Failure should not ordinarily be admitted with imipramine until four weeks have elapsed. If drug therapy is to be used primarily, it seems desirable to provide a supply of a sedative to be used if tensional symptoms occur. If primary drug treatment fails, electroconvulsive therapy may still be effective. In neurotic depressions there seems little doubt but that drugs offer the treatment of choice. It is probably advisable to give concurrent sedation right from the start. If electroconvulsive therapy is given together with the drugs, it should be limited to three or four treatments, continuing the drug. Formal psychotherapy may be initiated concurrently with drug therapy.

It may sometimes be extremely difficult to distinguish between neurotic and psychotic depression and to appraise anxiety by ordinary clinical methods. In such cases the sedative threshold tests have often proved helpful. In patients in whom the distinction between neurotic and psychotic depression remains in doubt, it seems logical to administer drug therapy first. Continued observation may help to clarify the picture, and the complications of electroconvulsive therapy, which may retard progress if the case is one of neurotic depression, will be avoided.

Psychopathic Hospital

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ACKNOWLEDGEMENTS

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M. H. IVEY *and* **F. B. ENGLEY, JR.,** ***Columbia***

Intestinal Parasites

A Survey of a Mid-Central Missouri Population

The prevalence of intestinal parasites was studied in a selected group of individuals. Results and methods of testing are discussed.

M. H. Ivey is Assistant Professor in the Department of Microbiology of The University of Missouri School of Medicine and F. B. Engley, Jr., Ph.D., is Professor and Chairman of the Department of Microbiology at the University.

A REVIEW OF THE literature revealed little information concerning the prevalence of parasitic infections in Missouri. In one study reported from St. Louis, Tsuchiya and Jean[1] found 2.1 per cent of 562 medical and dental students harboring *Endamoeba histolytica.*

The purpose of this study was twofold: One, to provide information on the prevalence of parasitic infections in this area; two, to compare the usefulness of various laboratory procedures in detecting parasitic infections.

METHODS

The population examined in this study was personnel of the University of Missouri Hospital and faculty of the School of Medicine. This population was selected because of its accessibility and the ease with which fecal samples could be collected. Fecal samples were collected in such a manner that in no case were the specimens over two hours old at examination. Information as to age, sex, race, marital status and salient facts concerning water supply, waste disposal and garbage disposal were recorded. A total of 194 persons submitted one fecal specimen each for examination. Each fecal specimen was examined by means of a saline smear, Quensel's stain (a trophozoite stain) and Ritchie's[2] formalin-ether concentration method.

RESULTS

A total of 29 parasites were identified in 25 individuals, or 12.9 per cent of the population examined. Interestingly, no intestinal helminths were found. The number and species of protozoa identified by the various laboratory procedures utilized may be seen in table 1.

As shown in table 1 *Endamoeba histolytica* was identified in three persons. The remaining 26 parasites were nonpathogenic species, the majority being *Endamoeba coli.* Of the 29 parasites detected, 28 were identified by the formalin-ether method, four by Quensel's stain and only one identified by saline smear. However, cysts were detected in 10 instances in the simple smear and seven cases in Quensel's stain but no identification was attempted.

Although pathogenic protozoa were not uncovered to any great degree (1.5 per cent) nonpathogenic protozoa do serve as an index to the quality of sanitation. A comparison of the percentage of persons infected as related to various sanitation factors may be noted in table 2. As shown in table 2, 10.2 per cent of individuals possessing flush toilets harbored protozoa as compared with 35.0 per cent of the individuals with non-flush toilets. Also, only 9.7 per cent of persons using city water harbored protozoa as compared with 29.0 per cent using private water sources. In many instances, however, non-flush toilets and private drinking supplies were both utilized by the same family.

No appreciable differences were found when the factors of age, sex and race were compared.

DISCUSSION AND CONCLUSIONS

No helminths were uncovered in this survey. Recent reports by Brooke et al.[3] uncovered no helminths among 600 individuals examined during an outbreak of amebiasis at South Bend, Indiana. A survey by Harper et al.[4] also revealed similar findings in other sections of Indiana.

In this study only three (1.5 per cent) out of 194 persons examined harbored *E. histolytica.* However, only one stool specimen was examined and from a population group with considerably higher standards than many rural areas. With more frequent examinations from a population group with lower sanitary standards, a higher prevalence of *E. histolytica* might be found. Mackie et al.[5] found 6.1 per cent of 1,934 persons harboring E. histolytica in North Carolina. Harper et al.[4] found 5.0 per cent of 120 persons harboring *E. histolytica.* In the latter study, however, three stools were examined for each person.

The fecal specimens in this study were examined by simple saline smear, Quensel's stain and Ritchie's concentration technique. A comparison of the results obtained by each of the three techniques revealed some interesting information. Only one protozoa was identified by the simple saline smear. However, in this study no iodine stained smear was performed in conjunction with the simple smear. If this had been done, no doubt 10 persons with cysts present, could have been identified. The Quensel's stain, a trophozoite stain, allowed identification of four individuals with trophozoites present. In seven other persons cysts were observed but not identified as cysts do not stain by this method. If Quensel's stain had been used in conjunction with an iodine smear for cyst identification, then its efficiency would have been of the same magnitude as the simple smear plus iodine smear. However Ritchie's concentration technic alone uncovered and identified 28 instances of protozoa. This is almost three times the potential of either the saline smear or Quensel's stain even if they were used in conjunction with the iodine smear and assuming the identification of all unidentified cysts. In areas such as Central Missouri, where prevalences appear to be low, special concentration technics should be used to detect infections. Not only are there few infections but those infections that exist are usually of low intensity, necessitating concentration procedures even to demonstrate the parasites.

TABLE 1

THE NUMBER AND SPECIES OF PROTOZOA IDENTIFIED BY DIFFERENT LAB PROCEDURES FROM A SAMPLE OF 194 PERSONS

Protozoa	*Total Identified*	*Laboratory Method*		
		SALINE	QUENSEL	FORMALIN-ETHER
E. histolytica	3	—	2	3
E. coli	19	—	1	19
E. nana	4	—	—	4
I. butschlii	2	—	—	2
T. hominis	1	1	1	—
TOTAL	29	1*	4**	28

*Cysts were observed in 10 stools but no iodine smear was done to identify.
**Cysts observed in 7 stools but not identified.

The relationship of toilet facilities and water supply to infection was indicated in table 2. It may be noted that 10.2 per cent of persons with flush toilets harbored protozoa as opposed to a 35 per cent prevalence rate in persons with non-flush toilets. The same sort of trend is observed in connection with water supply sources, persons with city water having a prevalence rate of 9.7 per cent versus 29.0 per cent in people with private water supplies. The data, although not sufficiently large for statistical analysis, indicate the type of environmental situations where most protozoa are likely to occur. This same relationship of environment to prevalence rate was more extensively investigated with similar findings by Mackie et al.[6] If future surveys were contemplated in this area, the use of concentration technics on the population groups with non-flush toilets and/or private water supplies would probably reveal the highest percentage of protozoa.

TABLE 2

PERCENTAGE OF PERSONS HARBORING VARIOUS PROTOZOA AS RELATED TO SANITATION

Sanitation Factor	*Possessing Factor*	*Number Protozoa Detected*	*Per Cent Detected*
Flush Toilet	176	18	10.2
Non-Flush Toilet	20	7	35.0
City Water Supply	165	16	9.7
Private Water Supply	31	9	29.0

SUMMARY

One hundred and ninety-four hospital and University of Missouri employees were examined for intestinal parasites by means of simple saline smear, Quensel's stain and Ritchie's concentration technic. The results revealed no helminths at all and that only three (1.5 per cent) persons harbored *E. histolytica.* Altogether 12.9 per cent of individuals examined harbored some protozoan species. The results definitely indicated Ritchie's concentration technic to be far superior to either the simple saline smear or Quensel's stain. The data indicated higher prevalence rates in groups with either private water supplies or non-flush toilets. It was suggested that future surveys of intestinal parasites in this area would be more profitable if concentrative technics were used on population groups with non-flush toilets or private water supplies.

(Continued on page 32)

VAN W. TAYLOR, M.D., ***Bonne Terre***

Obstetrics in a Rural Missouri Hospital

There has been a great increase in the number of deliveries in rural Missouri hospitals in the last few years. It is believed that an analysis of obstetries as done in one of these hospitals should be of interest. This study is based on the records of all deliveries, abortions and ectopic pregnancies in the Bonne Terre Hospital from June 1, 1946, to June 1, 1959. The hospital is in Bonne Terre (pop. 4,000), St. Francois County (pop. 37,000), from which county a majority of the patients come. Except for an osteopathic hospital, it is the only one in the county. The nearest other hospitals are 30 and 45 miles away. In 1949 the capacity of the hospital was increased from 44 to 75 beds, of which 20 are in the obstetric division. The obstetric department of the hospital is well equipped. There are two delivery rooms. The nursery has three sections and a formula room. One small room is for isolated patients. Another room for premature infants has four incubators and one Isolette and a third room is for normal babies. There have been no epidemics among the newborn infants. Since 1948 a Red Cross blood bank has been maintained and this has been a lifesaver on several occasions.

Hospital deliveries are constantly increasing in both rural and metropolitan areas. A review of obstetrics in a rural hospital during a thirteen year period is presented.

Dr. Taylor is a graduate of Rush Medical College and also has an M.Sc. degree in surgery from the Graduate School of Medicine, University of Pennsylvania. Except for time spent in graduate training and Army service, he has practiced in St. Francois County since 1927.

TABLE 1

TOTAL DELIVERIES

	No.	*Per Cent*
Mothers delivered	9,286	
Maternal deaths	2	.0214
Presentations		
Vertex	8,894	94.8
Breech	421	4.7
Transverse	44	0.48
Face	19	0.21
Total babies	9,378	
Abnormal temperature	185	2.0
Hemorrhage	129	1.28
Eclampsia	30	0.32
Forceps deliveries	1,068	11.5
Cesarean sections	281	3.03

During this 13 year period, 34 physicians have delivered babies in the hospital. About two thirds of the deliveries were by four physicians. Until recently, the hospital staff had no separate department of obstetrics. A permanent committee of three staff members formulated general policies. Because of a ruling by the State Division of Health, the hospital staff is now departmentalized and there is a chief of the obstetric service. There has been no essential change in obstetric practice in the hospital since this was done. There is no particular supervision of the doctors who do obstetrics. Consultations are required for all cesarean sections and curettements. Otherwise, each doctor has the sole responsibility for the care of his patients unless he feels that he needs advice or help. There are no obstetric specialists on the staff and all of the deliveries were by physicians with no formal training in obstetrics beyond that received in medical school and internship.

As shown in table 1, 9,378 babies were born

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to 9,286 mothers. There were 90 twins and one set of triplets. The latter were premature and none survived. There have been two maternal deaths, both due to obstetric causes. The first of these occurred in 1947 and was a neglected transverse presentation brought to the hospital with an arm protruding. A version was done on a dead fetus, resulting in a ruptured uterus and a rapidly exsanguinating hemorrhage. The other death occurred in 1949. This one had a placenta praevia and previously had been a patient in a hospital in St. Louis. She left there against advice and came home to her mother's. When she again began to bleed, she at first refused hospitalization because "they stuck her with too many needles." When finally brought to the hospital she was in extremis and died shortly after a transfusion was started.

INFECTIONS

One hundred eighty-five of the mothers, including those delivered abdominally, had temperatures of 100.5 F. or more on at least two successive days during their hospital stay. It could not be determined from the records how many of these were true puerperal sepsis or were due to other kinds of infections or to swollen breasts.

HEMORRHAGE

Of the patients delivered, 129 had hemorrhages severe enough that they were given transfusions. Seventy-one of these had cesarean sections and the other 58 were delivered vaginally.

OPERATIVE OBSTETRICS

Cesarean sections will be discussed in another part of the paper. One thousand sixty-eight babies were delivered by forceps. The incidence of forceps deliveries varied greatly with the staff members. Of the four doctors who did the greater amount of obstetrics, one applied forceps for 27 per cent of his deliveries. The other three used forceps for 5 per cent of theirs and of these one used them for only 1.2 per cent. One staff member used forceps 30 times in 52 deliveries. Another used them once in 151 deliveries. The only versions were for deliveries of babies in transverse presentations. No Duhrssen's incisions of the cervix have been done.

TOXEMIA

There were 30 mothers who had eclampsia severe enough to cause one or more convulsions. Sections were performed on seven of these and the other 23 were treated conservatively. The number of pre-eclamptic patients could not be determined, as there has been no criterion established for this diagnosis.

ANESTHESIA AND ANALGESIA

In vaginal deliveries, combinations of barbiturates, phenergan and demerol were generally used for the first stage. Infrequently, this was supplemented with scopalamine. As labor progressed and during the second stage, nitrous oxide or trilene, self-administered or by the nurse, were used and only occasionally supplemented with ether. A few saddle block spinals were done and one doctor administered 379 caudals. Episiotomies and repairs were usually done under local infiltration anesthesia. Pudendal nerve block has been used to some extent during the last several years.

EARLY AMBULATION

During the early part of this period, only two staff members permitted early ambulation. For the last several years, however, it is almost routine for all patients, including those delivered abdominally, to be out of bed between 12 to 24 hours following delivery. In 1958 the average length of hospital stay for all mothers was four days.

PREMATURITY AND FETAL MORTALITY

There were 321 babies whose birth weight was less than 5 pounds (see table 2). Sixty-eight of these were stillborn. Of the 253 premature babies born alive, 82 or 32 per cent died. Of the full term babies, 71 were stillborn and there were 34 neonatal deaths. Thus, prematurity and associated factors accounted for 150 of the 255 fetal deaths. The total fetal mortality of 255 was 2.7 per cent

TABLE 2

PREMATURITY AND FETAL MORTALITY

	No.	*Per Cent*
Premature births	321	3.3
Premature stillbirths	68	21.2
Premature neonatal deaths	82	25
Total premature fetal mortality	150	46
Full term births	9,057	
Full term stillbirths	71	.78
Full term neonatal deaths	34	.37
Total full term mortality	105	1.05
Total stillbirths	139	1.49
Total neonatal deaths	116	1.23
Total fetal mortality	255	2.73

of all births. In addition to this, 34 newborn infants were transferred to other hospitals for specialized medical or surgical care. The records do not show what happened to all of these. However, it is known that several of them died, so that the overall fetal mortality for babies born in this hospital is about 3 per cent.

Cesarean Section

Table 3 shows the indications for cesarean sections. There were 281 sections, or 3.03 per cent of the mothers delivered. Spinal anesthesia was used for 208 of the operations. Gas-oxygen-ether was used for 62 and nine were done under caudals. Eighty-nine incidental appendectomies were done. All of these were during the last nine years. There have been four complications of note. Two of these were wound disruptions and two others were femoral vein thromboses.

TABLE 3

INDICATIONS FOR CESAREAN SECTIONS

	No.
Previous cesarean section	81
Cephalo-pelvic disproportion	
With test of labor	29
No test of labor	15
Malposition of fetus	
Breech	21
Transverse	22
Persistent occiput posterior	3
Mento-posterior	3
Toxemia	
Eclampsia	7
Pre-eclampsia	18
Placenta praevia	30
Abruptio placenta	21
Prolapsed cord	6
Prolonged labor	14
Rheumatic heart disease	4
Diabetes	1
Obstruction of birth canal due to metastatic carcinoma	1
Rh sensitization	1
Poorly defined indications	4
Total cesarean sections	281

Hysterectomies

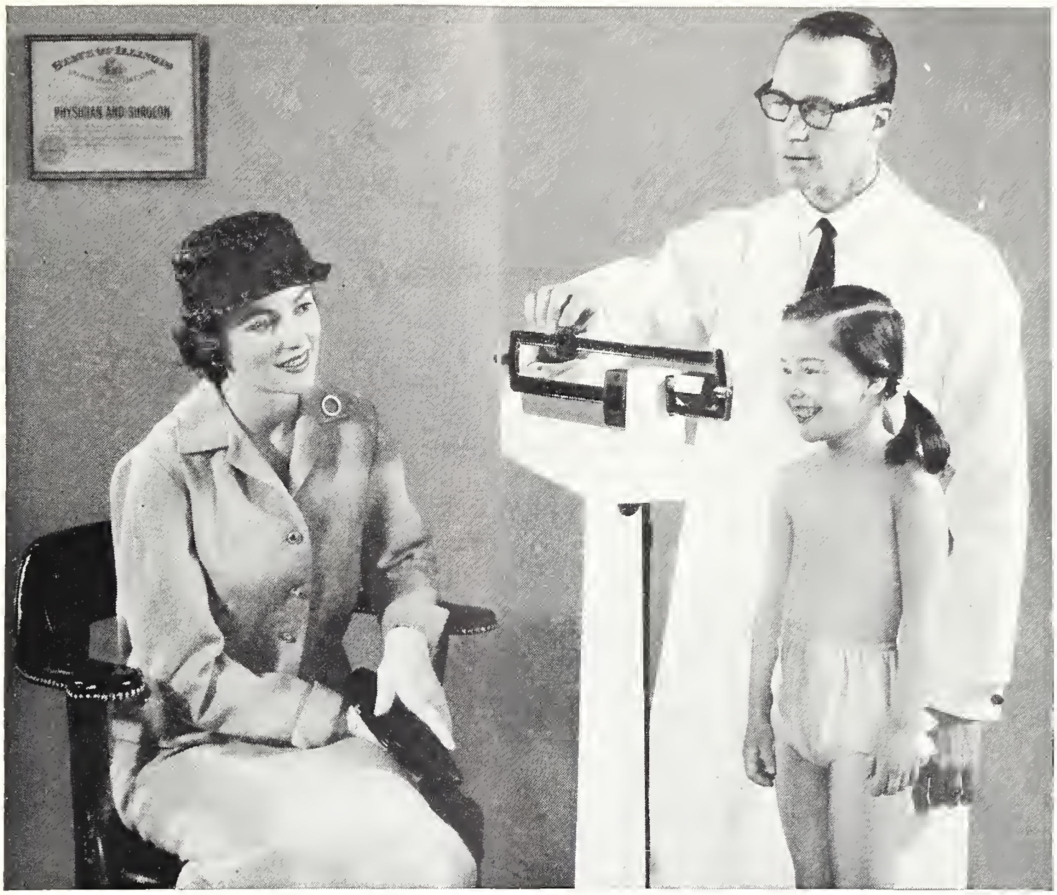
Twenty-one hysterectomies have been done for quite a variety of reasons. These indications cannot be tabulated very well and will be briefly described. Seven were Porro sections. Three of these were because of abruptio placenta with hematoma of the uterus and adjacent structures and two were done when large fibroids were found at operation. Two others were done when the placenta could not be removed following section for placenta praevia. The pathologist reported that one of these was a true placenta accreta. Two uteri were removed because of spontaneous rupture. One of these was a gravida 9 and the rupture occurred at home early in labor. The other one occurred in the fourth month of pregnancy and was through the scar of a previous low cervical cesarean section. Seven hysterectomies were done because of uncontrollable hemorrhage following normal vaginal deliveries and apparently normal deliveries of the placentae. Three others were done because of severe hemorrhage during and following partial manual removal of retained placentae. One other, after an uneventful postpartum course of 16 days, had a severe hemorrhage which persisted after curettement and the usual medical management. Another one who was delivered elsewhere 31 days previously had a hysterectomy for the same reason. Neither of these uteri had an appreciable amount of retained placental tissue and the cause of the bleeding was not determined.

Abortions and Ectopic Pregnancies

There were 1,081 abortions and immature deliveries during this period. Included in these were eight patients who had hydatidiform moles. Three therapeutic abortions were done for pernicious vomiting. Fifty ectopic pregnancies were treated surgically. There were no fatalities among these. One patient who was being treated in the hospital for threatened abortion signed herself out and later miscarried and died of hemorrhage in the ambulance on her way back to the hospital.

Summary

An analysis of obstetrics over a period of thirteen years in a rural Missouri hospital is presented. During this time 10,371 pregnancies were terminated. There were 1,081 abortions, 50 ectopic pregnancies and 9,286 deliveries. There were no fatalities among the patients with abortions and ectopic pregnancies. Of the mothers delivered, there were two deaths, or a rate of 2.14 per 10,000. The fetal mortality rate was about 3 per cent. Over half of these were due to prematurity and associated factors. Two hundred eighty-one cesarean sections were performed. This is a rate of 3.03 per cent.



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*Brown, S. S.; Libo, H. W., and Nussbaum, A. H.: Norethandrolone in the Successful Management of Anorexia and "Weight Lag" in Children, Scientific Exhibit presented at the Annual Meeting of the American Academy of Pediatrics, Chicago, Oct. 20-23, 1958.

ALEXANDER LICHTOR, M.D., *and*
JOSEPH LICHTOR, M.D., *Kansas City*

Salvage of the Hip

A Case Report

The use of a prosthesis for replacement of the femoral head has become popular in recent years.

Prosthesis for replacement of the femoral head has greater chance for failure when used in a young adult. A case in which removal of the prosthesis and angulation-osteotomy of the proximal femur was necessary is presented.

Dr. Alexander Lichtor and Dr. Joseph Lichtor are both attending physicians at the Menorah Hospital Division of Orthopedic Surgery.

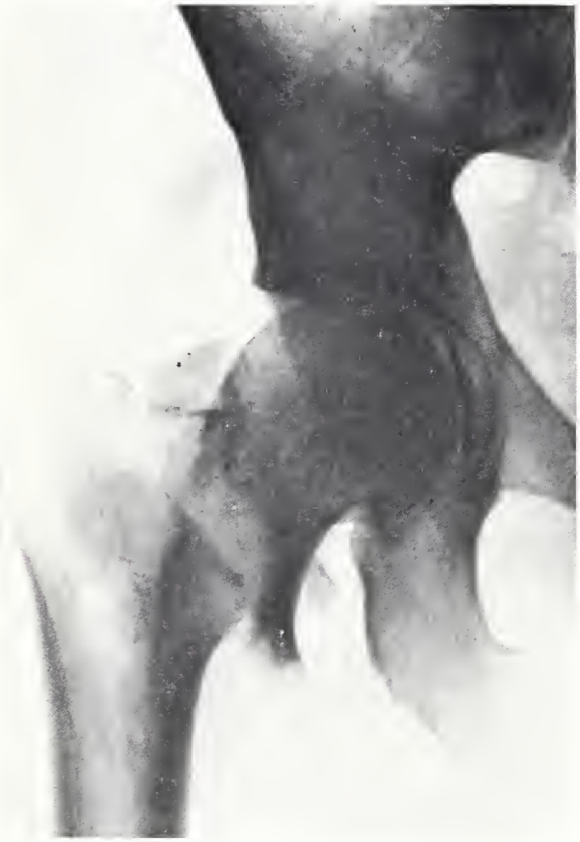

Fig. 1. Fracture of the hip.

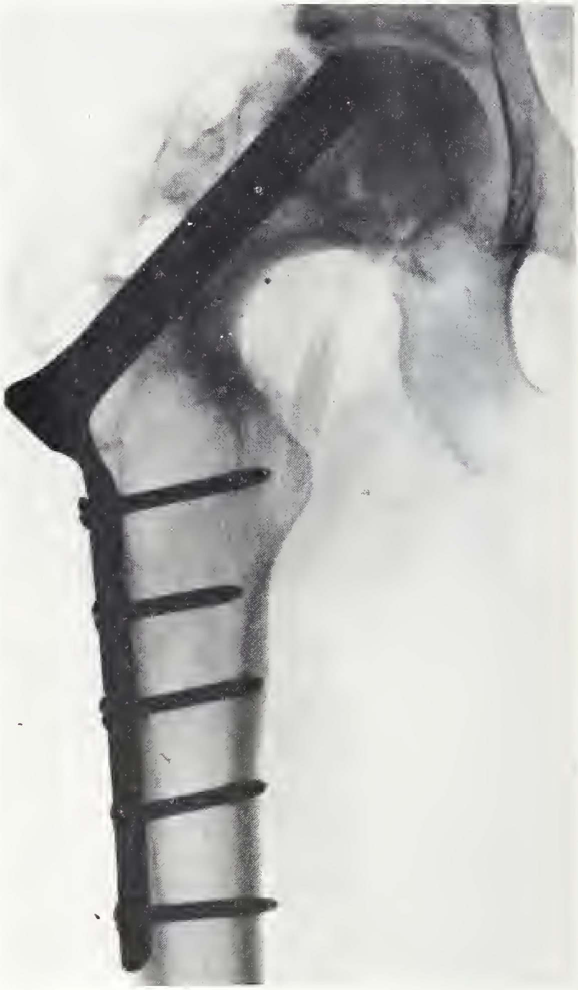

Fig. 2. Hip nailing device.

This substitution of a diseased or injured hip is a fascinating idea but the ideal is not always achieved.

Failure of a prosthesis is a disaster. When the head and neck of the femur have been removed there is little left with which to work.

Such a problem was observed in a young married woman who incurred a fracture of the right hip in December 1954 (fig. 1). She was treated elsewhere by means of a hip nailing device (fig. 2) and two years later with a replacement prosthesis (fig. 3).

When first seen by us she was 25 years of age and the prosthesis had been in for 17 months. Right hip pain was severe and there was almost no passive motion from its position of lateral rotation deformity. In addition to one inch atrophy of the right thigh the right lower extremity was one inch longer than the left. Even with crutches she was unable to walk because of the pain, stiffness and increased length.

Surgery performed consisted of removal of the prosthesis followed by an angulation-osteotomy to provide support under the pelvis (fig. 4).

One year after surgery she has no pain. Limping occurs because of shortening but no cane is used in the house. The range of right hip motion is full.

COMMENT

The femoral head-neck resection and angulation-osteotomy procedure was first made known by Milch in New York and Bachelor in London. It was originally used for ankylosis of the hip. In such cases the head and neck were excised, the proximal femur osteotomized and then angulated. Thus the sound basic principles of this old operation can be applied to the new indication of salvaging a hip with an untenable prosthesis. In order to minimize the incidence of failure with a hip prosthesis, it is strongly urged that it be used only for the patient over 65 years of age.

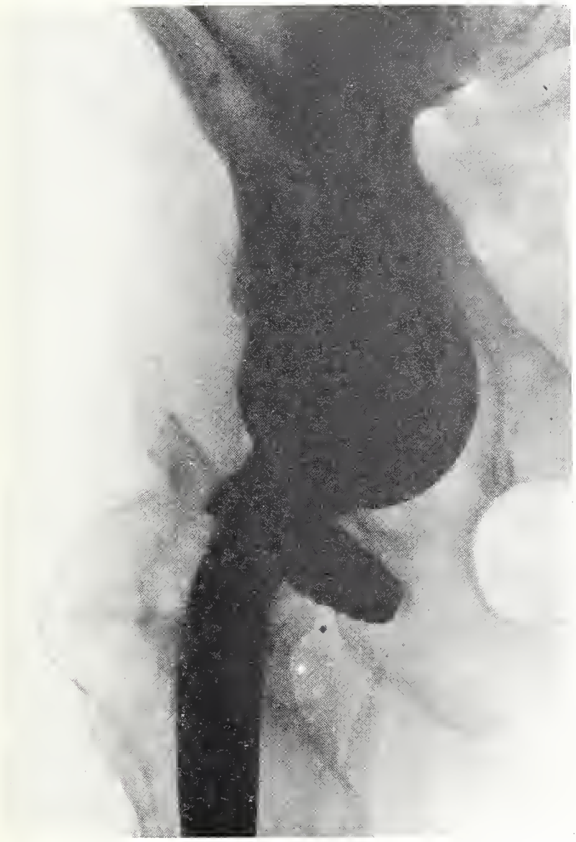

Fig. 3. Replacement device.

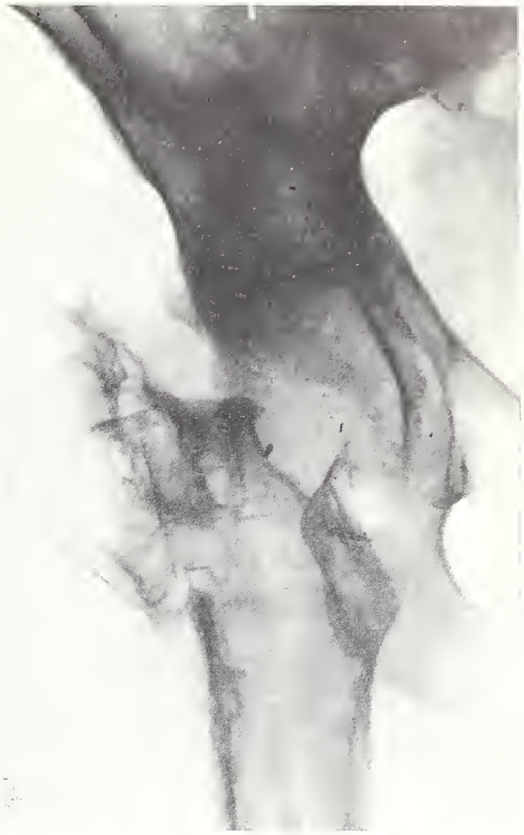

Fig. 4. Angulated-osteotomy done.

SUMMARY

A hip replacement prosthesis had failed to function properly in a young adult.

By removal of the prosthesis and angulation-osteotomy of the proximal femur she was able to return to a more active life.

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The Natural History of Emphysema in Man

Tuberculosis Abstract

The clinical course of typical diffuse emphysema is described. Patients with a less typical clinical picture and closely related clinical entities are also discussed.

The abstract is furnished by the National Tuberculosis Association and is from an article by Richard V. Ebert, M.D., which appeared in the *American Review of Respiratory Diseases,* July 1959.

In describing the natural history of a disease we must first establish a definition. To do this, we classified a group of patients into a category on the basis of one or more common characteristics. Once this is done, the clinical symptoms and course of the disease can be described.

DEFINING EMPHYSEMA

The problem in emphysema lies in the area of definition of the disease and hence classification of patients. If the records of any hospital are scanned, it will be found that the term emphysema is often loosely used and applied to a diversity of clinical problems. Hence, to give any coherent account of the clinical course of the disease, we must establish a rigid definition. The traditional method of classification of emphysema is based on clinical-pathological correlation. This method has severe limitations. The pathology of emphysema is not an all or none phenomenon. One can state with some assurance that a patient has or has not bronchogenic carcinoma or pulmonary tuberculosis. In the case of emphysema the degree of change in the lung may range from a few bullae or dilated air spaces to a condition in which both lungs may be almost entirely replaced by bullae. In emphysema the pathology must be defined quantitatively as well as qualitatively.

There are other problems related to the pathologic definition of emphysema. Most pathologists do not fix the lungs in an inflated state. Hence, the gross and microscopic evaluation of the disease lacks precision. The pathologic process is not accurately reflected in the roentgenogram and we must await the death of the patient for an accurate appraisal of the changes in the lung.

For these reasons clinicians have begun to rely more and more on a physiologic definition of emphysema. Unfortunately, the data are not available to correlate precisely this physiologic definition of the disease with the pathologic definition.

CLINICAL COURSE

A description of the clinical course of patients with typical diffuse hypertrophic or obstructive emphysema, in essence, differs little from the original description of Laennec. There are patients, however, who present a less typical clinical picture.

The chief symptom of emphysema is dyspnea beginning as exertional dyspnea. The patient notes that his activity is being limited progressively because of shortness of breath. Often this limitation of activity is attributed to aging or loss of physical fitness. Finally the patient is unable to walk even a short distance without being tortured by dyspnea. Episodes of dyspnea occur at rest and are accompanied by wheezing. These acute episodes, often referred to as "asthma," are usually precipitated by an upper respiratory infection. Administration of adequate amounts of antimicrobial drugs usually gives dramatic relief.

Cough is a persistent symptom in most patients with emphysema. The sputum production is greatest following a respiratory infection. Many patients with emphysema have a slight decrease in the oxygen saturation of the hemoglobin of the arterial blood and a slight increase in carbon dioxide tension. There appears to be little correlation between the degree of hypoxia and the severity of the dyspnea.

The most serious threat to the life of the patient with emphysema is the sudden increase in hypoxia and hypercapnia which accompanies an exacerbation of the bronchitis. He has a sudden increase in dyspnea and becomes cyanotic, and often disoriented and confused. Cough and fever may be absent, and secretions accumulate in the trachea and bronchi. Administration of oxygen may lead to improvement, or the patient may lapse into coma as a result of an increase in carbon dioxide tension in the arterial blood and respiratory acidosis. Death may occur if treatment is not prompt and effective.

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patients and is manifested by cardiac enlargement, elevated venous pressure, and hepatomegaly. There is no evidence to indicate that this adversely influences the function of the lungs. The heart failure is usually not chronic but clears when the acute bronchial infection subsides and the hypoxia improves.

The prognosis of emphysema is not well defined. In part this is related to difficulties of classification and definition. There are a number of patients who apparently have emphysema but who do not follow the classical clinical course just given.

Associated Conditions

One of the controversial aspects of emphysema is its relationship to bronchial asthma. A number of patients with typical emphysema will give a previous history of bronchial asthma. The episodes of dyspnea accompanying acute bronchial infection in emphysema are difficult to differentiate from true bronchial asthma. Hence it is difficult to determine whether previous episodes were asthma or bronchitis. The incidence of pulmonary emphysema in patients with known bronchial asthma is also difficult to establish. The relationship between bronchial asthma and emphysema needs further clarification.

A similar problem exists in the relationship between chronic bronchitis and emphysema. It is clear that chronic bronchitis is often associated with pulmonary emphysema and that acute bronchial infection precipitates the more severe episodes of dyspnea and hypoxia.

There also appears to be a relationship between bronchiectasis and emphysema. A mild cylindrical dilatation of the bronchi is found on the bronchograms of many patients with emphysema, but certain patients have the findings of saccular bronchiectasis. The bronchiectasis precedes by some years the symptoms of emphysema. Moreover, a number of patients with severe bilateral bronchiectasis develop pulmonary insufficiency. There also appears to be an undue incidence of diffuse pulmonary emphysema complicating other chronic inflammatory diseases of the lung. A focal type of emphysema has been described in the lungs of coal miners.

Certain changes in pulmonary function occur with aging. There is a decrease in vital capacity and an increase in residual volume in association with a change in the elastic properties of the lungs. These elderly persons have no respiratory symptoms but if such persons develop bronchitis, the physiologic findings could readily be confused with emphysema.

Many patients with emphysema will demonstrate an increase in the anteroposterior diameter of the chest associated with hyperresonance to percussion and a tendency to obliteration of the cardiac and hepatic dullness. Similar changes occur in many elderly persons without emphysema. Moreover, some patients with emphysema do not exhibit this phenomenon. It would appear that the barrel-chest phenomenon is related to aging changes in the skeleton. For some reason it tends to occur prematurely in patients with emphysema.

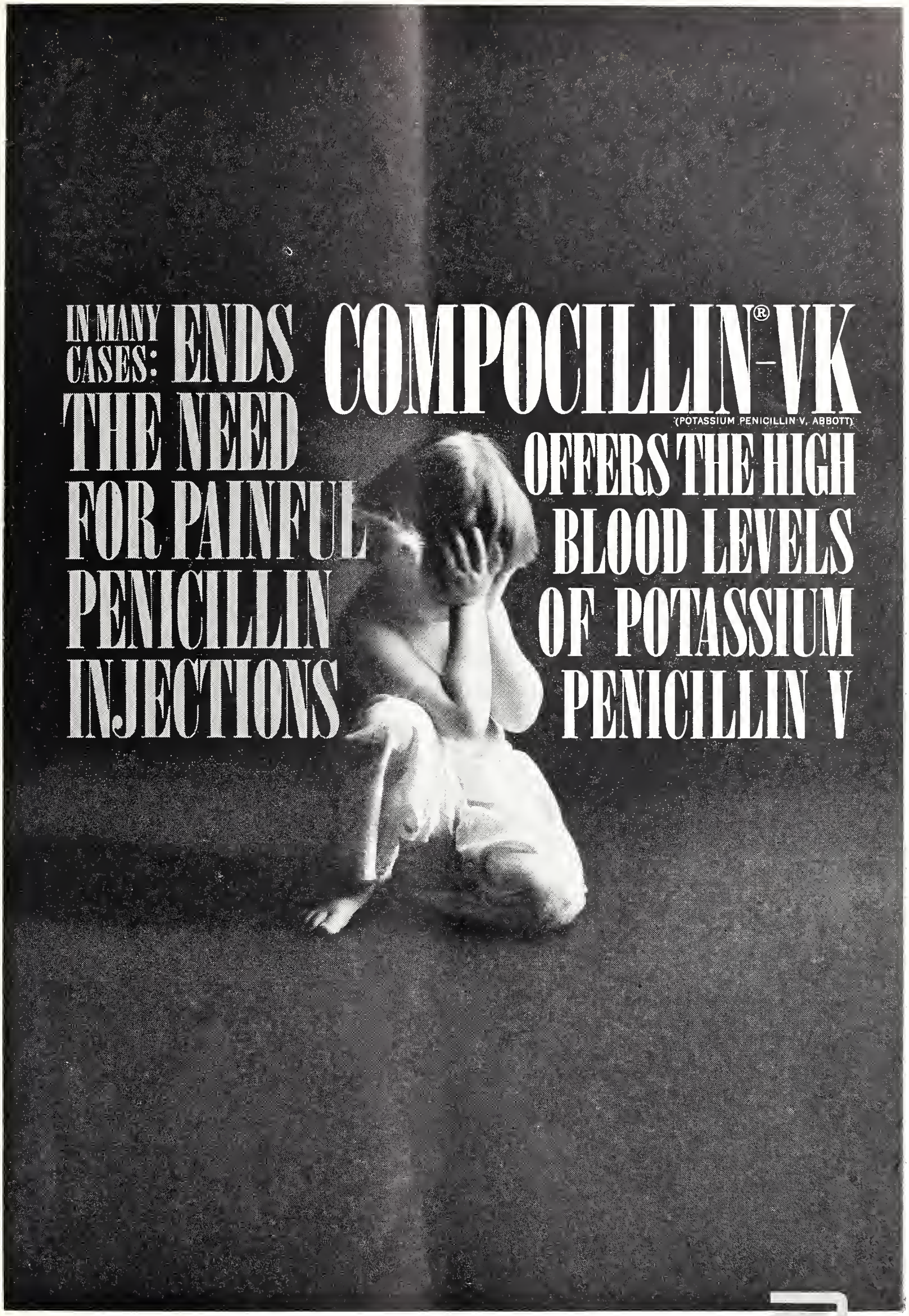
VENEREAL DISEASE STILL A PROBLEM

Since the introduction of the antibiotics, Health Information Foundation points out, the over-all death rate from syphilis has dropped from 12 persons per 100,000 population in 1943 to 2.2 in 1958. Nevertheless, an estimated million persons in this country still have the disease.

Although the incidence of venereal disease is still high, 30 infants in this country died from congenital syphilis last year, while 3,460 would have died if the 1930 rate had continued, according to Health Information Foundation.

Despite sharp drops in the incidence of venereal disease since the development of antibiotics, an estimated 60,000 cases of syphilis and 1,000,000 of gonorrhea are still acquired each year.

The rate of first admissions to mental hospitals for paresis has dropped from 4.7 per 100,000 population to 0.5 since the antibiotics were introduced. In spite of such figures, according to Health Information Foundation, the problems of venereal disease in the U. S. are far from solved, chiefly because of public apathy and ignorance.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A Special Article by **LOUIS M. ORR, M.D.,** *Orlando, Florida*

Physicians Must Be Citizens

President's Address

It is pointed out that American medicine moves closer each day toward the most important crisis that it has ever met and the Forand Bill is the opening maneuver in a scheme to bring federally controlled medicine to the United States step by step. A plea is made that physicians take an active part as citizens in politics, public affairs and community life.

Dr. Orr, a urologist of Orlando, Florida, is President of the American Medical Association. This President's Address was presented at the opening session of the Dallas Clinical Session of the A.M.A. Appearing on the same program were the Honorable Sam Rayburn, speaker of the House of Representatives, and Honorable Lyndon B. Johnson, Senior Senator from Texas, and Leader of the Senate.

Mr. Speaker, Members and Guests of the House of Delegates:

Since I last addressed you in June at our annual meeting, I have been traveling wide, far and almost constantly. If any of you here today aspire to be President of the A.M.A., let me tell you frankly that it is a rough, strenuous job—but most rewarding.

During the last three months, I have addressed more than thirty-five major groups of various kinds. Included, in widely scattered parts of this country, have been regional, state and county medical societies, insurance and allied professional organizations, voluntary health groups, medical school students, service clubs, press clubs and special conferences.

On the international scene, I also have had the privilege of speaking to the Brazil Medical Association in Bela Horizonte, the officers of the Council of the British Medical Association in London, the World Medical Association in Montreal, the Canadian Medical Association in Toronto, and the Puerto Rico Medical Association in Santurce.

In all these travels, both here and abroad, I have tried to present the American Medical Association's viewpoint on major issues and matters of mutual interest. But I have also listened and tried to learn—about other people's viewpoints, problems, failures and successes.

On the basis of my own travels, plus the opinions and experiences which have been reported to me, I should like to emphasize a few points which I think demand the attention of this House of Delegates and the medical profession as a whole.

At the time I was in Brazil, an effort was being made to enact a form of compulsory health insurance. As a guest speaker, I had the opportunity to present our views on this subject—from the standpoint of our opinions here, and the experiences of other countries which have taken steps into government-controlled medicine. I believe, on the basis of comments and opinions after my address, that I was able to spark a renewal of resistance to the idea. And at last report, there is every indication that Brazil will reject the proposal for national compulsory health insurance.

Brazil is a long way off, but we have the same problem here—whether we recognize it fully or not—and we also have the need for a greatly revitalized resistance.

I refer, of course, to the Forand Bill and all the possible variations and gyrations which will be put into play in the presidential election year of 1960. That, gentlemen, is next year—and time is running short.

The Forand Bill is basically unsound in that it proposes the wrong solution to the problem of financing the health care of the aged.

It is the aged needy and the near needy for whom financing mechanisms must be improved. And this need should be met primarily at the local and state level. Expansion of OASDI as recommended by Mr. Forand would not help the needy since few would be eligible for such benefits. On the other hand, it would have a catastrophic impact on voluntary health insurance for those over 65 who want and can purchase such coverage.

In short, the Forand approach to the financing of health care of the aged does not meet the need where it exists, and destroys progress where it is being made.

No matter how limited or diluted a version of the Forand Bill might be enacted, we know that it would be simply the first step toward the evolution of a system of national compulsory health insurance for the entire population.

Therefore, and assuming that you agree with the two brief points I have emphasized, I am taking the liberty of charging the members of this House of Delegates with two specific duties:

1. I ask you to do everything within your power and influence to see that the orientation program on the Forand Bill is carried out vigorously on both the state and county levels. This program was outlined to representatives of your state societies at the recent meeting in St. Louis. I repeat now what I said then in a transcribed message, which some of you may already have heard:

"American medicine moves closer each day toward the most important crisis that we have ever faced. . . . The Forand Bill is the opening maneuver in a scheme to bring federally controlled medicine to the United States, step-by-step."

2. Even more important, in my opinion, I charge you with the responsibility of seeing that your state and county societies are carrying out a vigorous, imaginative program with respect to aging and health care of the aged. The American Medical Association—cognizant of the fact that our responsibility is not simply to defeat undesirable legislation in Washington, but rather to provide effective leadership in meeting whatever needs exist—has developed a positive program in which every state and county should be participating.

Medicine must provide this leadership. This House of Delegates showed the way just a year ago in Minneapolis when it approved the proposal for adjusted fees which would help stimulate the development of health insurance plans for persons over 65 with limited resources—or low family income.

According to the latest figures I have, 33 Blue Shield plans in 31 states now enroll persons over 65 years of age. Nineteen plans in 13 states are in various stages of developing special health insurance programs for older people. All Blue Shield plans now permit persons over 65 to continue their coverage. And the private insurance companies are moving ahead rapidly, with the extension to more states of existing plans, and with the introduction of new plans. Sixty-two insurance companies, for example, now offer insurance coverage for persons 69 years of age or older.

When you consider that 43 per cent of our population over 65 are now covered by voluntary health insurance contracts and that it is predicted that 60 per cent of this group will be covered by the end of 1960—that is real progress.

Related to this question of health care for the aged is the policy of establishing programs which guarantee physicians' services to all, regardless of ability to pay. Individual doctors, of course, have always observed this medical tradition, and they always will. For generations—in fact, for centuries—the ethical physician always has given of his time and talents, free of charge, or at a reduced fee, depending upon the financial status of the patient.

Since 1946 an increasing number of medical societies have been establishing formal programs providing a guarantee of physicians' services, regardless of ability to pay. Many societies have for years had informal programs based on the same idea.

You may recall that this House of Delegates—seven years ago at the 1952 Clinical Meeting in Denver—urged all medical societies to establish organized, publicized programs of this kind. In my own travels, during the last year and a half, I have been impressed and heartened by reports on some of the programs that are in active operation.

However, there is room for improvement. A lot of good work has been done, but much more remains to be done. We not only have to establish still more of these programs, but we also have to do a better job of telling the public about them.

Vigorous, imaginative efforts to implement guarantee-of-physicians-services programs would supplement our Minneapolis action on insurance plans for the aged, and our many activities in the field of indigent medical care plans. In my personal opinion, you should give strong, unequivocal reaffirmation of the 1952 action at Denver.

Looking ahead, if we are to guarantee the best possible medical care for all the American people, I want to repeat my plea of last June for recruitment of qualified, dedicated young people into the study of medicine. One year ago in Minneapolis, this House of Delegates adopted a positive statement urging the sound expansion of existing medical schools.

This policy was evolved only after careful study of the nation's population growth, medical needs and the changing dimensions of medical knowledge. There is absolutely no argument over the continuing need for more doctors. One serious question, however, is how do we attract the best young people—those with both intelligence and ideals. Competition from the other sciences, the cost and length of postgraduate medical education, the discriminatory drafting into the armed services for a period of two years out of a physician's life, plus the ever-present dark clouds on the horizon in the form of legislation which threatens federal control of the practice of medicine—these are the things the young college graduate must face up to when he considers his choice of a profession. These are the things which will make our appeal for students to go into medicine more difficult. The A.M.A. has the program and the materials for such a recruitment program. Is your state society thinking about this problem and taking advantage of the aids available?

Are you also telling medicine's positive story at every opportunity—through the press, radio, TV, local organizations? Are you helping to break down the myth that the American Medical Association and the medical profession always are against something, never for anything? Are you, for example, getting across such facts as these?

From the very beginning we have supported the Hill-Burton Hospital Construction program, and we recently have been suggesting changes which would give the states greater flexibility in meeting the need for more nursing homes and chronic illness facilities.

In research programs, whether supported by private or public funds, we are emphasizing the need for proper emphasis on basic, long-range research—and for the establishment of life-time grants and so-called "think stations" which will lead to fundamental scientific knowledge providing the clues to practical medical problems.

We strongly supported that part of the recently-enacted housing bill which provides for FHA mortgage guarantees to stimulate the construction of more nursing homes.

We have urged physicians and medical societies to cooperate in every possible way to develop good medical care programs for the indigent.

During the first session of the 86th Congress, we either testified or presented statements on 19 occasions involving legislation affecting medicine or health problems. In 14 of these instances we supported the legislation in question. On four occasions our statements were simply for informational purposes. Only once did we actively oppose the legislation under discussion—and that was H. R. 4700, the Forand Bill.

This whole story—not only with respect to legislation but also with respect to our positive programs on aging, chronic illness, care of the indigent, medical school expansion, relations with third parties and many other areas—must be told more effectively, and then told and retold again. I am convinced that if more people knew more about the things we support and encourage, they would listen to us much more carefully about those occasional things that we oppose.

This leads to the final point I want to emphasize here today. Physicians must—and I repeat that word must—take a more active interest in the whole area of politics, public affairs and community life.

We live and practice in difficult, changing times. We can no longer confine ourselves entirely to the job of trying to be good doctors, and trying to keep abreast of scientific advances—as vitally important as this is.

I am not certain that we should ever have tried to so confine ourselves, for medicine cannot be practiced within an ivory tower.

We live, and practice, in a world subject to innumerable social, economic and political pressures. No citizen is immune to them. No citizen should remain unaware of them.

As physicians, we are called upon to raise our voices when the social, economic and political issues, involving medicine, are up for debate.

By the same token, as citizens we must remain alert and informed if we are to discharge our responsibility to our republic which depends upon a majority vote for its guidance.

A citizen cannot, simply because he is a physician, pass on to others his political responsibilities.

A physician cannot, if he values this nation's high standard of medical care, divert his gaze from the social, economic and political issues which affect the practice of medicine.

William Penn once remarked that "governments go by the motion men give them." No truer words have ever been spoken.

If governments are good, men and women have made them so. If governments are bad, men and women have allowed them to become so.

Politics is not an activity that should be entrusted to the venal or the second-rate. Nor is the word "politician" a term of opprobium.

Andrew Jackson, Abraham Lincoln and a host of others were politicians and proud of it. And

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ROLLA B. WRAY, M.D., ***Nevada***

A.M.A. Clinical Session

Special Article

Report of the Missouri Delegates to the A.M.A.—Joseph C. Peden, M.D., St. Louis; Durward G. Hall, M.D., Springfield; Rolla B. Wray, M.D., Nevada; H. E. Petersen, M.D., St. Joseph.

The Missouri State Medical Association was represented by four delegates at the Dallas session. Dr. H. R. McCarroll, St. Louis, served as a delegate representing the Section on Orthopedic Surgery. Alternate delegates, Drs. Guy N. Magness, University City, and J. Loren Washburn, Versailles, and former alternate, W. J. Shaw, Fayette, also attended. Dr. Alphonse McMahon, St. Louis, who is a member of the A.M.A. Council on Scientific Assembly and who will serve as delegate to the A.M.A. in 1960 representing the Section on Military Medicine, was in attendance. A larger number of MSMA members than usual were present (a list is given following this report).

Dr. Joseph C. Peden, St. Louis, served as chairman of the Reference Committee on Miscellaneous Business and gave the report for that committee. Dr. Durward G. Hall, Springfield, served as chairman of the Reference Committee on Medical Military Affairs and gave the report for that committee.

Freedom of choice of physician, relations between physicians and hospitals and a scholarship program for deserving medical students were among the major subjects acted upon by the House of Delegates at the American Medical Association's 13th Clinical meeting held December 1 to 4 in Dallas.

Dr. Chesley M. Martin, Elgin, Okla., was named as the 1959 General Practitioner of the Year for his outstanding contributions to the health and civic affairs of his home community. Dr. Martin, who has practiced in Elgin for the last 44 years, was the 13th recipient of the annual award and the first Oklahoman to be so honored.

Speaking at the Tuesday opening session of the House, Dr. Louis M. Orr, Orlando, Florida, A.M.A. President, urged the nation's physicians to take a more active interest in the whole area of politics, public affairs and community life. Dr. Orr also asked physicians and medical societies to do a more effective job of telling medicine's positive story, adding that "if more people knew more about the things we support and

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Physicians Must Be Citizens—Continued

the men who hammered out the Constitution of the United States recognized politics for what the dictionary defines it to be—the science and art of government.

Therefore, I think we have a double duty—as physicians and as citizens—to take an even more active part in the political and civic life of our nation, state and community. The A.M.A. Council on Legislative Activities has recommended that individual physicians or groups of physicians should participate in political action committees on a local basis, in their home communities.

I hope that each of you will take that recommendation home with you, and urge its vigorous implementation.

Walter Lippmann, the eminent journalist, pointed out in one of his recent columns that too many Americans seem to have the feeling that we live in a completed society. He said that we lack a sense of urgency, a sense of mission, about our way of life and the problems which confront us.

I think he is exactly right, and unfortunately what he says applies to physicians as well as to all our fellow citizens. We have lost sight of a beautiful, basic truth: the essence of our American democracy is a dynamic capacity for growth and change, a sense of adventure, a willingness to take risks, an enthusiasm for experiments and new methods.

If to live dangerously means to develop the full potentialities of our democratic, free enterprise system—through initiative, cooperation and public service—then I urge the medical profession to live dangerously—in a spirit of adventure.

encourage, they would listen to us much more carefully about those occasional things that we oppose."

Two nationally known political leaders from Texas also addressed the Tuesday morning session. Senator Lyndon B. Johnson, majority leader of the U. S. Senate, called for a "politics of unity" which will enable Americans to exert strength and determination in an effort to create a world in which all men can be free. Speaker of the U. S. House of Representatives Sam Rayburn urged greater attention to the task of educating young people in the principles of American government and giving them a desire to perpetuate it.

Total registration through Thursday, with half a day of the meeting still remaining, had reached 4,727, including 2,742 physicians.

Freedom of Choice

In considering four resolutions which in various ways would have changed or replaced the statements on freedom of choice of physician which the House adopted in June, 1959, when acting upon the recommendations in the report of the Commission on Medical Care Plans, the House reaffirmed the following two statements approved in Atlantic City:

1. "The American Medical Association believes that free choice of physician is the right of every individual and one which he should be free to exercise as he chooses."

2. "Each individual should be accorded the privilege to select and change his physician at will or to select his preferred system of medical care, and the American Medical Association vigorously supports the right of the individual to choose between these alternatives."

However, in order to clarify and strengthen its position on the issue of freedom of choice of physician, the House also adopted this additional amendment on the floor of the House:

3. "Lest there be any misinterpretation, we state unequivocally that the American Medical Association firmly subscribes to freedom of choice of physician and free competition among physicians as being prerequisities to optimal medical care. The benefits of any system which provides medical care must be judged on the degree to which it allows, or abridges, such freedom of choice and such competition."

Physician-Hospital Relations

The House received 12 resolutions on the subject of relationships between physicians and hospitals. To resolve any doubt about its position, the House did not act upon any of the resolutions but instead reaffirmed the 1951 "Guides for Conduct of Physicians in Relationships With Institutions." It also declared that "all subsequent or inconsistent actions are considered superseded."

The House also accepted recommendations that (1) the House of Delegates acknowledge the need to strengthen relationships with hospitals by action at state and local levels, (2) the Board of Trustees of the Association continue to maintain liaison with the Board of Trustees of the American Hospital Association, and (3) the Council on Medical Service review this entire problem to ascertain if there have been actions inconsistent with the 1951 Guides.

Those Guides summarize the following general principles as a basis for adjusting controversies:

"1. A physician should not dispose of his professional attainments or services to any hospital, corporation or lay body by whatever name called or however organized under terms or conditions which permit the sale of the services of that physician by such agency for a fee.

"2. Where a hospital is not selling the services of a physician, the financial arrangement if any between the hospital and the physician properly may be placed on any mutually satisfactory basis. This refers to the remuneration of a physician for teaching or research or charitable services or the like. Corporations or other lay bodies properly may provide such services and employ or otherwise engage doctors for those purposes.

"3. The practice of anesthesiology, pathology, physical medicine and radiology are an integral part of the practice of medicine in the same category as the practice of surgery, internal medicine or any other designated field of medicine."

Scholarship Program

To help meet the need for an increasing number of physicians in the future, the House approved the creation of a special study committee which was asked to:

1. Present a scholarship program, its development, administration and the role of the American Medical Association in fulfilling it.

2. Ascertain the maximum to which medical schools could expand their student bodies while maintaining the quality of medical education.

3. Ascertain what universities can support new medical schools with qualified students and sufficient clinical material for teaching—either on a two year or a full four year basis.

4. Investigate the securing of competent medical faculties.

5. Investigate financing of expansion and establishment of medical schools.

6. Investigate financing of medical education as to the most economical methods of obtaining high quality medical training.

7. Develop methods of getting well-qualified students to undertake the study of medicine.

8. Investigate the possibility of relaxing rigid geographic restrictions on the admission of students to medical schools.

The House urged that the special committee be implemented promptly with adequate funds and staff so that it may make an initial report by June 1960.

RELATIVE VALUE STUDIES

Reaffirming a previous policy statement, the House approved in principle the conducting of relative value studies by each state medical society, rather than a nationwide study or a series of regional studies by the A.M.A. The House also reiterated its authorization for the Committee on Medical Practices to inform each state medical association, through regional or other meetings, of the purpose, scope and objectives of such studies, the steps to be followed in conduction studies, the problems which may be encountered and the manner in which the results can be applied.

The House recognized, however, that some state medical societies are either not interested in relative value studies or are actively opposed to them. It pointed out that some state medical associations fear that the regional conferences of the Committee on Medical Practices will put pressure on them to carry out such studies and that this will result in the adoption of "fixed fees."

Since the regional conferences are educational in nature, the House said, it remains for each state or county medical association to accept or reject the idea of a study in its area.

The House expressed awareness of the fact that this is still a controversial matter. However, it commended the Committee on Medical Practices for its effort to carry out the instructions of the House, and it urged the committee to continue its educational work.

MISCELLANEOUS ACTIONS

In considering 44 resolutions and a large volume of annual, supplementary and special reports, the House also:

Learned that the A.M.A. Board of Trustees has appointed a liaison committee to meet with similar committee of the American Osteopathic Association to consider matters of common concern;

Emphasized that local medical societies should insure that no member violates ethical traditions as they relate to ownership of pharmacies or stock in pharmaceutical companies;

Approved the plan of the Committee on Medical Rating of Physical Impairment to publish its new guide on the cardiovascular system in the *A.M.A. Journal.*

Recommended that Association councils and committees, whenever feasible, hold their meetings in the remodeled Chicago headquarters;

Called for investigation of the need, desirability and feasibility of establishing a home for aged and retired physicians;

Commended Dr. F. S. Crockett, retiring chairman of the Council on Rural Health, for his many years of devoted duty;

Urged active promotion and careful study of the newly developed "Guides for Medical Care in Nursing Homes and Related Facilities";

Suggested that fees for consultative examinations under programs of the Bureua of Old Age and Survivors Insurance should be adjudicated directly between the state medical society and the state agency involved;

Registered a strong protest to the Veterans Administration, urging stricter screening of nonservice-connected disability patients admitted to government hospitals;

Reiterated the Association's support of the Blue Shield concept and directed the Council on Medical Service to submit at the June 1960 meeting its recommendations concerning a policy statement on A.M.A. relationship with Blue Shield plans;

Suggested that S. J. Res. 41, a bill which would institute a separate program of international medical research, be delayed until an over-all assessment can be made of proposals now before Congress dealing with domestic and international medical research;

Endorsed the program of the Educational Council for Foreign Medical Graduates but also urged that judicious consideration be given to local problems involved in the July 1, 1960, deadline for certification of foreign graduates;

Urged that medical schools include in their curricula a course on the social, political and economic aspects of medicine;

Declared that the threat of nuclear warfare has imposed a tremendous responsibility on the medical profession, which must be prepared to assume a critically important role in such an event;

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Suggested that the A.M.A. make available to school libraries information and literature showing the advantages of private medical care and the American free enterprise system;

Stated that examinations to determine the physical and mental fitness of aircraft crew members should be made by doctors of medicine with special knowledge and proficiency in certain technics;

Urged the American people to get proper tetanus toxoid, original and booster, and other immunizations as indicated from their physicians, and called on A.M.A. members to cooperate in an education program on tetanus immunization;

Recommended that all state and county medical societies establish programs for the inspection and testing of all fluoroscopes and radiographic equipment;

Approved the Speaker's proposal that the opening session of the House, at the Interim Meeting, be moved from Tuesday morning to Monday morning, with the reference committee meeting on Tuesday and the House reconvening on Wednesday afternoon;

Called upon each individual physician to wage "a vigorous, dynamic and uncompromising fight" against the Forand type of legislation;

Urged state and local medical societies and individual physicians to implement the A.M.A. program for recruitment for high-grade medical students:

Changed the title of the Section on Surgery, General and Abdominal, to the Section on General Surgery;

Accepted with appreciation a $2,500 contribution by Smith, Kline and French Laboratories toward establishment of a suitable award honoring the name of Dr. Thomas G. Hull, retiring secretary of the Council on Scientific Assembly, and

Reaffirmed the "Suggested Guides to Relations Between Medical Societies and Voluntary Health Agencies" which were adopted at the December 1957 meeting in Philadelphia.

At the Tuesday opening session, six medical societies presented nearly $250,000 to the American Medical Education Foundation. The checks turned over to Dr. George F. Lull, president of AMEF, were: California, $156,562; Indiana, $35,570; New York, $19,546; Utah, $10,355; New Jersey, $10,000, and Arizona, $9,263.

In addition to those mentioned, MSMA members present at the meeting were: Drs. Robert T. Burns, M. B. Casebolt, R. D. Dwyer, Robert V. Kirk, L. M. Shapiro, L. F. Steffen, W. Clarke Wescoe, Carrol P. Hungate, Martin P. Hunter, Joseph C. Williams, Robert F. Lamar, Kansas City; Richard Paddock, Emmett D. Wall, Lillian Reeant, Garland F. Smith, Jean Holowach, Don L. Thurston, St. Louis; Vern T. Bickel, Lamar; D. M. Eubank, Raytown; Robert N. Hodge, Theodore F. Edwards, North Kansas City; L. S. Arany, Excelsior Springs; Robert S. Cohen, Poplar Bluff; Scott C. Benson, St. Joseph; C. H. Isbell, Carthage; Seymour J. Kranson, Independence; Earl L. Loyd, Jefferson City; Doyle C. McCraw, Bolivar; Glenn E. Roark, Columbia; Joseph A. Conrad, Chillicothe; I. E. Goldberg, Braymer.

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President's Message

Ralph Perry, M.D.

In November I had the privilege of presiding at the opening session of the A.M.A. Regional Conference on Aging in Kansas City. It was an impressive gathering of some 400 people from five states and many professions who spent two days exploring the opportunities for positive health and meaningful living among older people, through the exercise of individual, group and community initiative.

I was particularly struck, as I believe were the members of the Missouri State Medical Association Committee on Aging who attended, with the many different groups and organizations now concerning themselves with the problems of the aging. I was gratified at the emphasis, not so much on health, but on meaningful living, which to me must be the foundation for a successful program for our older citizens.

More than anything else, however, the meeting reinforced my conviction of the importance and urgency of positive action by the medical profession to exercise initiative and leadership in programs for the aging. The M.S.M.A. Committee on Aging will do its part at the state level, as will, I am sure, the local society committees that have been recommended. But in the final analysis, each individual physician will have to do a substantial job—not only in his practice, but by providing personal leadership and guidance for the interested organizations and civic groups in his community.

We know that the widespread interest and concern for older people can sometimes, unfortunately, result in misguided and undesirable programs. The organization of effective committees in every local medical society and the systematic involvement of individual physicians in community activities dealing with aging can assure sound programs and maintain our high standards of private medical care. It is one of the most important steps the medical profession can take—and one of the most urgently needed.

Ralph Perry

EDITORIALS

NUMBER OF MEDICAL SCHOOLS INCREASING

In 1955 the School of Medicine of the University of Missouri, as a four-year school, was established, bringing to three the number of medical schools in Missouri. Since that time two other four-year schools have been established, the Albert Einstein College of Medicine and the Seton Hall College of Medicine.

In a recent issue, *Patterns of Disease* diversed from disease to an analysis of medical education of today.

More than 450 medical schools have existed at one time or another in this country, some for brief periods only, others for nearly 200 years. Of these Missouri has accounted for 33, of which there are now only St. Louis University School of Medicine, Washington University School of Medicine and the University of Missouri School of Medicine.

Among the oldest of the schools currently active and approved are the University of Pennsylvania School of Medicine, established in 1765; Columbia University College of Physicians and Surgeons, established in 1767, and Harvard Medical School, established in 1782.

Publicly owned medical schools today number 39 and privately owned 45. Seven medical schools have been activated since 1943 and another is being organized at the University of Kentucky. A two-year school of the West Virginia University School of Medicine is being converted into a four-year program. However, it has been estimated that as many as 31 more medical schools will be needed in order to maintain the ratio of one physician to each 750 population by 1970, and another estimate gives 20 schools as sufficient.

In the last decade, total annual enrollment of all classes of medical students has risen by approximately 7,000. The average number of students per school has decreased, however, from 370 in 1955-56 to 347 in 1958. Four schools enrolled more than 600 students each, the University of Tennessee, University of Michigan, Jefferson University and Illinois University.

It is estimated that about half of all medical school applicants are accepted, although great variations exist from school to school. Private schools as a group received almost three times as many applications as tax-supported schools for the year 1957-58.

Women comprise about 5.4 per cent of the total enrollment, although at four schools the figure is 10 per cent. These are Howard University, Boston University, New York University and Western Reserve University. One school, Woman's Medical College of Pennsylvania, limits enrollment to women, and two schools, Dartmouth and Jefferson, admit only men.

Of all first-year medical students in 1957-58, 41 per cent came from six states: New York, Pennsylvania, California, Ohio, Illinois and Texas. The thirty-two schools in these states, or 38 per cent of all medical schools in the country, accounted for 41 per cent of the total first-year enrollment.

It is estimated that more than $270,000,000 was the expenditure for 1957-58 of the nation's 84 medical schools. Median expenditure per school was approximately $2,875,000. During 1958 more than $4 million was donated to medical schools by physicians, more than $1 million through the American Medical Education Foundation. Through the National Fund for Medical Education, corporations, individuals and the Ford Foundation contributed more than $3 million in unrestricted grants in 1958.

The Council on Medical Education and Hospitals of the American Medical Association has announced that the 1958-59 graduating class receiving M.D. degrees numbered 6,860, only one less than in 1957-58. These two classes were the largest except for the 1954-55 year when the class was 6,977. The increase in that term was occasioned by including as graduates 50 students completing the intern year, then required by Stanford University.

The total enrollment in first year medical school classes for the 1958-59 academic year was 8,128, the largest to date in the United States. Entering class sizes increased in 35 schools, were unchanged in 24 and decreased in 26. A total of 59,102 applications were filed by 15,170 persons, or an average of 3.9 applications made by each prospective medical student.

Ramblings of the Field Secretary

More than 400 people attended the Regional Conference on Aging held at Hotel Muehlebach in Kansas City, November 16-17. This session was sponsored by the AMA Council on Medical Service and the AMA Committee on Aging in cooperation with the state medical associations of Illinois, Kansas, Missouri, Nebraska and Oklahoma. The purpose of the conference was to explore the opportunities for positive health and meaningful living among older people through the exercise of individual, group and community initiative.

Representatives from various organizations and agencies as well as individuals specifically concerned with the so-called "aging problems" from the five states area were invited to participate.

Dr. Ralph Perry, Kansas City, President of MSMA presided at the opening session on Monday morning, November 16. Dr. Stanley Peterson, Springfield, Chairman, Committee on Aging, MSMA, and Dr. Richard H. Kiene, Kansas City, President, Missouri State Society for Crippled Children and Adults, were moderators on Monday morning of respective panels entitled: "Capabilities of Seniors: An Untapped Resource"; "Achieving the Promise: Areas for Action."

"Health Care for the Aged" was the topic on Tuesday morning. A panel on "What's Happening in Our States" included papers by Dr. Peterson, Wm. D. Bryant, Ph.D., Kansas City, Executive Director, Community Studies, Inc., and Mr. Neil Wortley of the Missouri Division of Health, substituting for Dr. H. M. Hardwicke, Acting Director.

Another interesting panel entitled, "Financing Health Care Services" was moderated by John F. Bowser, M.D., Kansas City, President-Elect of the Jackson County Medical Society.

In this panel discussion, Dr. Rita Campbell, Ph.D., Washington, D. C., Consulting Economist, American Enterprise Association, Inc., reported that public and private pension and medical insurance programs for the aged are growing at a rapid rate. This, she said, will take an increasing number of the aged out of the category of those unable to pay for their own health care. She also pointed out that the approximate 15,400,000 persons now in the U. S. who are 65 and over cannot be considered as a homogenous group either as to income or medical problems. She stated that private health insurance plans should offer some form of prepayment, during the working years, for health care during the years of retirement.

Nineteen million people are now covered by private pension plans with assets of some 40 billion dollars. This figure is expected to increase to 77 billion dollars by 1965 the speaker said.

Dr. Campbell reported that more than 70 per cent of social security beneficiaries own their own homes and 87 per cent of these are mortgage-free. A recent Federal Reserve Study, she said, showed that one-fifth of the aged have liquid assets of $5,000 or more, compared to an average of one tenth for the total population.

MISSOURI ACADEMY OF GENERAL PRACTICE

(Continued from page 14)

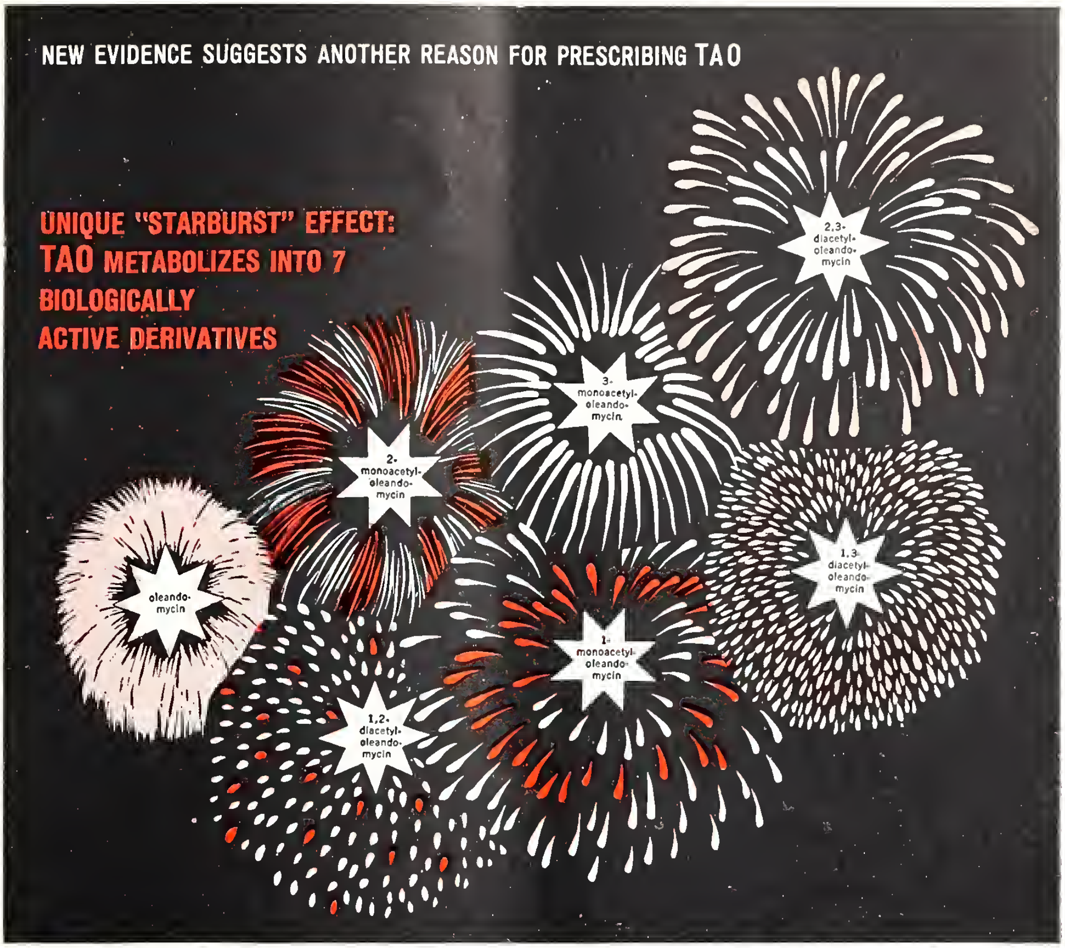
Harry K. Cohen, M.D., Kansas City. John H. Pearl, M.D., St. Clair, is serving a three year term as Secretary-Treasurer, encompassing the years 1959, 1960 and 1961.

P. C. Hall, M.D., St. Louis was installed as President of the Academy for the year 1960. Substitutes were in the majority during the President's Installation ceremonies at the banquet on Saturday night, November 7. Dr. P. V. Siegel, Smithton, the out-going President, and Dr. P. C. Hall, St. Louis, the incoming President, were both absent because of illness. Dr. William Allen, the out-going Vice President, substituted for Dr. Siegel while Dr. Charles Metz, the incoming Vice President, filled the shoes of Dr. Hall.

As an important highlight of the banquet, Dr. Allen presented to State Senator John W. Noble, of Kennett, the Academy's 1959 plaque for outstanding contributions in the promotion of better health for the citizens of Missouri. The banquet address was given by Rabbi Ferdinand M. Isserman of Temple Israel in St. Louis.

The Academy's 12th Annual Scientific Assembly will be held November 5-6, 1960, at the Chase Hotel in St. Louis.

Dr. Thomas A. Dooley of St. Louis, now a medical missionary in Loas, was made an honorary member of the Missouri Academy of General Practice at the 11th Annual Assembly. Dr. P. C. Hall, President of the Academy, presented Dr. Dooley with an appropriate memento at a public dinner, December 2, at the Sheraton-Jefferson Hotel in St. Louis, sponsored by the St. Louis Junior Chamber of Commerce.


NEW EVIDENCE SUGGESTS ANOTHER REASON FOR PRESCRIBING TAO
UNIQUE "STARBURST" EFFECT: TAO METABOLIZES INTO 7 BIOLOGICALLY ACTIVE DERIVATIVES
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oleando-mycin
1,3-diacetyl-oleando-mycin
1-monoacetyl-oleando-mycin
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The impression that TAO is an unusually active antibiotic has steadily gained recognition by impressive clinical performance. Now come reports of **in vivo** and **in vitro** biological and biochemical evaluations that show TAO to be indeed unique.[1,2]

TAO differs from other antibiotics in that it is metabolized to multiple active compounds which **remain** active throughout their presence in the body. These 7 derivatives (in addition to TAO) show activity against common Gram-positive pathogens, including resistant strains of **Staph. aureus.**

In light of these findings, take another look at TAO performance: • 92% success in published cases of Gram-positive respiratory, skin, soft tissue and genitourinary infection • Effective against 78% of 64 "antibiotic-resistant" epidemic staphylococci. (In the same study, chloramphenicol was active against 52%; erythromycin against only 25%)[3] • No side effects in 94%; infrequent reactions mild and easily reversed • Quickly absorbed • Highly palatable.

Sound reasons to: Start with TAO to end 9 out of 10 common Gram-positive infections.

Supplied: TAO Capsules—250 mg., and 125 mg., bottles of 60. **TAO for Oral Suspension**—125 mg. per tsp. (5 cc.) when reconstituted; unusually palatable cherry flavor; 60 cc. bottle. Prescription only.

Other TAO forms available: TAO Pediatric Drops: flavorful, easy to administer. **TAO®-AC:** TAO analgesic, antihistaminic compound. **TAOMID®:** TAO with triple sulfas. **Intramuscular** or **Intravenous:** in clinical emergencies. Prescription only.

1. English, A. R., and McBride, T. J.: Proc. Soc. Exper. Biol. & Med. 100:880 (Apr.) 1959. 2. Celmer, W. D.: Antibiotics Annual 1958-1959, New York, Medical Encyclopedia, Inc., 1959, p. 277. 3. English, A. R., and Fink, F. C.: Antibiotics & Chemother. 8:420 (Aug.) 1958.

designed for superior control of common Gram-positive infections

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News—Personal and Professional

New officers of the Southwest Missouri Chapter of the American College of Surgeons elected the following officers at a meeting on October 21: **Robert D. Duncan,** M.D., Springfield, president; **Robert Maher,** M.D., Springfield, vice president; **Charles E. Lockhart,** M.D., Springfield, secretary-treasurer; and **Joseph G. Sieeluff,** M.D., Springfield, **Norman Barnett,** M.D., Joplin, and **Irwin T. Craig,** M.D., Joplin, councilors.

Surgery Grand Rounds were conducted by **Claude J. Hunt,** M.D., Kansas City, at the University of Missouri Medical Center on October 21. On October 26, Dr. Hunt attended the meeting of the American Cancer Society in New York City.

Among faculty of St. Louis University School of Medicine who have served 25 years and were presented service awards at a Founders Day Student Convocation November 23 were **Peter G. Danis,** M.D., **William H. Bailey,** M.D., **E. Lee Dorsett,** M.D., **Armand D. Fries,** M.D., **Joseph B. Grindon,** M.D., and **Paul C. Schnoebelen,** M.D., all of St. Louis.

The Missouri Academy of General Practice installed **Preston C. Hall,** M.D., St. Louis, as president at a meeting on November 7. **Charles O. Metz,** M.D., St. Louis, was elected vice president; **Cecil G. Leitch,** M.D., Kansas City, president-elect. **John F. Pearl,** M.D., St. Clair, remains secretary-treasurer.

"Sight-Saving Pupils" was the subject of a talk by **J. T. Robinson,** M.D., Kansas City, at a November 19 meeting of the Parents Group at the Troost School, Kansas City.

George A. Johns, M.D., formerly superintendent, since 1953, of the Marshall State School and Hospital, has gone to Pikesville, Md., for retirement.

The National Association for Exceptional Children, at a meeting in Kansas City on November 14, heard a talk by **A. H. Chapman,** M.D., Kansas City, on "Education of the Exceptional Child."

The Business and Professional Women's Club of Sikeston recently held a "bosses' night" and **Wilson J. Ferguson,** M.D., Sikeston, was the subject of a "This Is Your Life" program.

The Woman's Auxiliary of the St. Louis Medical Society was addressed on its annual community service day by **C. Howe Eller,** M.D., St. Louis County health commissioner.

The Greater Kansas City Home Economics Association was addressed recently by **Albert Preston, Jr.,** M.D., Kansas City, on "Mental Health in the Home."

A collection of items once owned by or related to the career of the late Arthur R. McComas, M.D., formerly of Sturgeon, were on display during November in the main corridor of the University of Missouri Medical Sciences Building.

The St. Louis Dermatological Society elected **Calvin C. Ellis,** M.D., as president; **Lawrence K. Halpern,** M.D., vice president, and **James C. Sisk,** M.D., secretary.

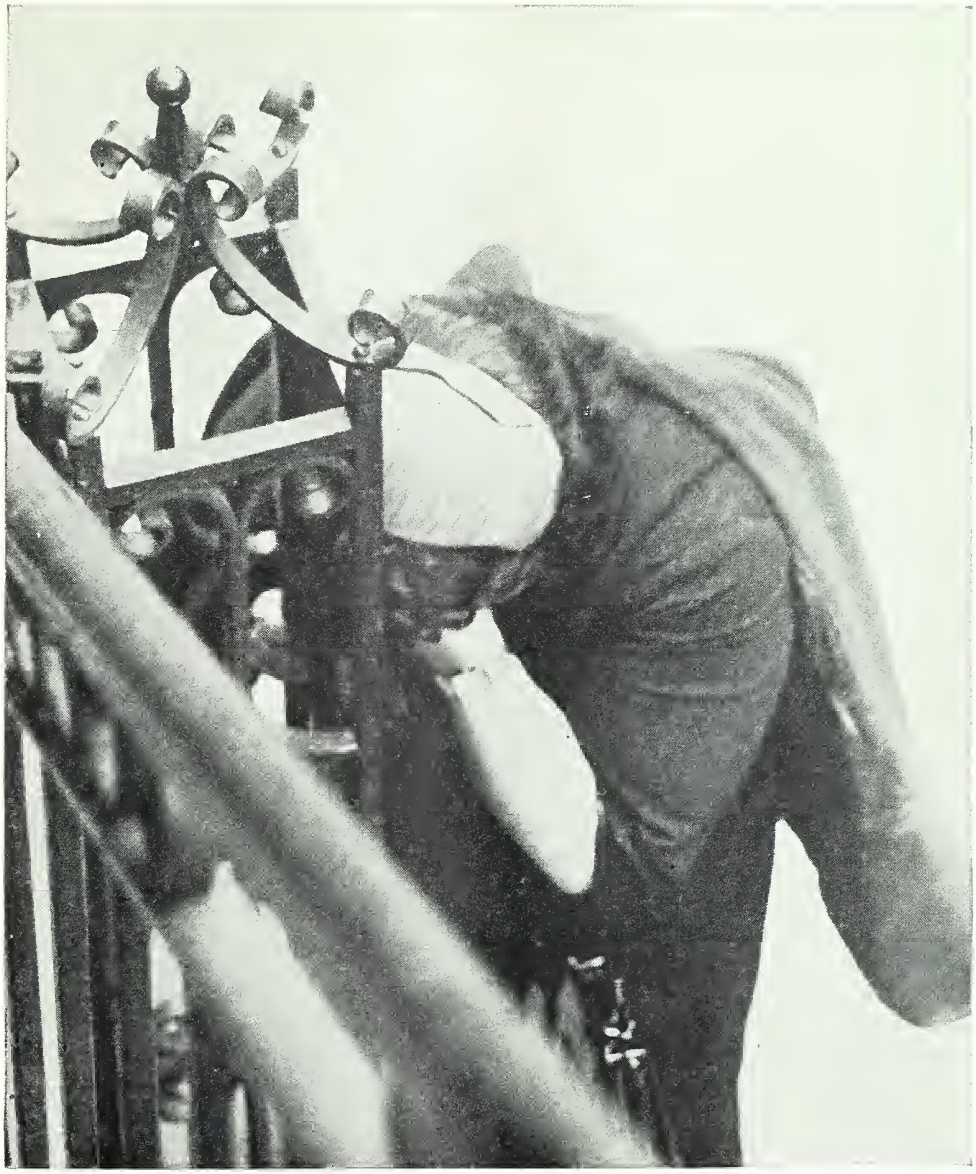
The Jasper County Home Economics Extension Council recently had as speaker **Richard R. Cohle,** M.D., Carthage.

For his service to mankind in helping publicize the Papanicolaou test, **Paul F. Fletcher,** M.D., St. Louis, has been named a hereditary knight commander of justice of the Knights of Malta.

The Washington University Medical Society recently elected **Sol Sherry,** M.D., St. Louis, as vice president.

The Jasper County Medical Secretaries and

WHEN BLOOD PRESSURE MUST COME DOWN...



When hypertensive symptoms such as dizziness, headache and fainting are frequent enough and severe enough to interfere with your patient's activity and safety—then it is time to consider the beneficial actions of Serpasil-Apresoline. Both Serpasil and Apresoline lower blood pressure. When the Serpasil-Apresoline combination tablet is prescribed, blood pressure response is even better. In addition, Serpasil contributes favorable calming and heart-slowing effects. Apresoline increases renal blood flow, decreases cerebral vascular resistance and inhibits the actions of humoral pressor agents. Combined with Serpasil, Apresoline is effective at a lower dosage, thus side effects are rarely a serious problem.

SUPPLIED: *Tablets #2* (standard-strength), each containing 0.2 mg. of Serpasil and 50 mg. of Apresoline. *Tablets #1* (half-strength), each containing 0.1 mg. of Serpasil and 25 mg. of Apresoline. *Samples available on request.*

Serpasil®-Apresoline®

hydrochloride

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[illegible]

CIBA SUMMIT, NEW JERSEY

Assistants Society had as a recent speaker **Roland T. Smith**, M.D., Joplin.

The Johnson County Mental Health Association had as a recent speaker **Louis Belinson,** M.D., Jefferson City, who spoke on "The Function of a Local Mental Hygiene Association in the State's Program for Mental Health." Dr. Belinson also spoke before the Missouri Political Science Association in Columbia.

The Missouri Hospital Association presented its achievement award in recognition of meritorious personal services performed in behalf of the community to **Arch E. Spelman,** M.D., Smithville.

The new president of the Christian Civic Foundation of Madison County is **C. E. Michaelis,** M.D., Fredericktown.

The Greene County Medical Secretaries and Assistants Society heard a talk on "Country Practice" by **T. M. Macdonnell,** M.D., Marshfield, on November 4.

The Kennett Lions Club was addressed this fall by S. **B. Beecher,** M.D., Poplar Bluff.

The Fortnightly Club of Columbia was addressed by **Gwilym S. Lodwick,** M.D., Columbia, at a meeting in November. The subject was "Atoms and Medicine."

The Nevada Benton Pre-School P.T.A. was addressed by **L. P. McCann,** M.D., Nevada, on "Getting Through Childhood Diseases" at a meeting in November.

"Postage Stamps and Medicine" was the subject presented by **C. Gordon Stauffacher,** M.D., Sedalia, at a meeting in Columbia sponsored by the University of Missouri Medical History Group.

"Mental Health" was discussed by **Alfred K. Baur,** M.D., Fulton, at a meeting of the Women's Guild and the Brotherhood of the United Church of Christ at a meeting in Fulton in November.

At a meeting of the Missouri State Dietetic Association in Columbia, **Charles F. Grabske,** M.D., Kansas City, spoke on "Man Studies His Heart Through the Centuries."

Accomplishments in treatment of heart diseases were outlined to directors of the Ozark Regional Heart Association by **Glenn O. Turner,** M.D., Springfield, at a meeting in Springfield.

"The State of Mental Health" was the subject of a talk given by **Louis Belinson,** M.D., Jefferson City, before the National Council of Jewish Women in Kansas City in November.

The Junior Service League of Independence was addressed at a November meeting by **Louis H. Forman,** M.D., Kansas City, on "Parent-Child-Teacher Relationships."

"The Care of Cardiac Patients" was the subject of a talk by **Albert M. Estes,** M.D., Cape Girardeau, before the Cape Girardeau Chapter of the Missouri State Association of Licensed Practical Nurses.

As a part of a session of the St. Louis Junior League's "Lifeline of St. Louis" series, **Addison M. Duval,** M.D., Jefferson City, spoke on "Missouri's Basic Health Needs."

The Missouri State Nurses' Association, 12th District, at a meeting in Bonne Terre, were addressed by **George A. Oliver,** M.D., Farmington.

"A Doctor's View of the Hospital Auxiliary" was discussed by **W. B. See,** M.D., Columbia, at a meeting of the Boone County Hospital Auxiliary.

The Cape Girardeau County Medical Secretaries and Assistants Society were addressed by

in every arthritic state
long-term therapy
with maximum relief of pain
without steroids

Buffered **Pabirin**® *Tablets*
improved salicylate therapy

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Paul B. Nussbaum, M.D., Cape Girardeau at a fall meeting on "Pediatric Urology."

The Mississippi Valley Medical Society at an election on November 22 elected **Preston C. Hall**, M.D., St. Louis, as president-elect. **J. M. Martt**, M.D., Columbia, was elected vice president for Missouri.

Dr. Paul Dudley White, Boston, was the speaker at ceremonies honoring the 70th birthday of **Arthur E. Strauss**, M.D., St. Louis. The lecture was presented at the auditorium of Jewish Hospital, St. Louis.

NEW MEMBERS

James H. Allen, M.D., 307 S. Euclid Ave., St. Louis 10, became a member of the St. Louis County Medical Society on October 21, 1959. Dr. Allen is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1955. He interned at St. Mary's Hospital, Clayton, and served a residency at St. John's Hospital, St. Louis.

Jean A. Chapman, M.D., 1902 Broadway, Cape Girardeau, became a member of the Cape Girardeau County Medical Society. Dr. Chapman is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1953. He served a residency at City Hospital, St. Louis.

C. Howe Eller, M.D., 801 S. Brentwood, Clayton 5, became a member of the St. Louis County Medical Society on October 21, 1959. Dr. Eller is a native of Indiana, received his preliminary education in California, and his M.D. degree from the University of Colorado School of Medicine in 1930.

Henry L. Knock, M.D., 145 W. Adams, Kirkwood, became a member of the St. Louis County Medical Society on October 21, 1959. Dr. Knock is a native of Maryland, received his preliminary education in maryland, and his M.D. degree from Johns Hopkins University School of Medicine in 1953.

Lucia V. Martin, M.D., St. Luke's Hospital, St. Louis, became a member of the St. Louis County Medical Society on October 21, 1959. Dr. Martin is a native of Santiago, Chile, received her preliminary education in Chile, and her M.D. degree from the University of Chile Medical School in 1946.

Vincent P. Muenster, M.D., 206 Washington, St. Charles, is a new member of the Lincoln-St. Charles County Medical Society. Dr. Muenster is a native of Missouri, received his preliminary education in Maryland, and his M.D. degree from St. Louis University School of Medicine in 1949.

Jose M. Sala, M.D., Ellis Fischel State Cancer Hospital, Columbia, is a new member of the Boone County Medical Society. Dr. Sala is a native of Argentina, received his preliminary education in South America, and his M.D. degree from University Litoral Medical School in 1944.

DEATHS

Blaylock, Richard D., M.D., Jackson, a graduate of Barnes Medical College, 1903; a member of Cape Girardeau County Medical Society; aged 87; died October 25.

Johnson, Paul A., M.D., Kansas City, a graduate of the University of Kansas School of Medicine, 1927; a member of Jackson County Medical Society; aged 56; died October 26.

Reichman, John J., M.D., Hannibal, a graduate of St. Louis University School of Medicine, 1929; a member of Marion-Ralls-Shelby County Medical Society; aged 54; died November 6.

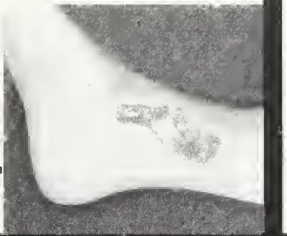
Hallberg, John W., M.D., Everton, a graduate of Northwestern University School of Medicine, 1912; a member of Jackson County Medical Society; aged 72; died November 12.

Allee, Warren L., M.D., Eldon, a graduate of St. Louis University School of Medicine, 1906; Past President of the Missouri State Medical Association; a member of Miller County Medical Society; aged 77; died November 22.

Oglevie, Rial R., M.D., Kansas City, a graduate of the University of Kansas School of Medicine, 1923; a member of Jackson County Medical Society; aged 62; died November 25.

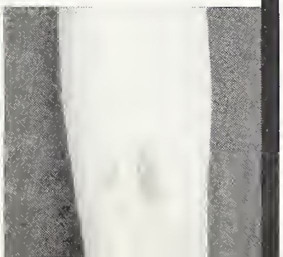
Duffy, Edgar A., M.D., Trenton, a graduate of St. Louis University School of Medicine, 1899; a member of Grand River Medical Society; aged 81; died November 28.

FORCE INJURY
severe bruises
. . . swelling
. . . cleared
by fifth day[2]



VARICOSE
ULCER
15 years duration
. . . resolved with
VARIDASE[1]

INFLAMMATORY
DERMATOSIS
rapidly spreading
rhus dermatitis
healed within
a week[1]



INFECTED
LACERATION
narked reversal
in 3 days . . .
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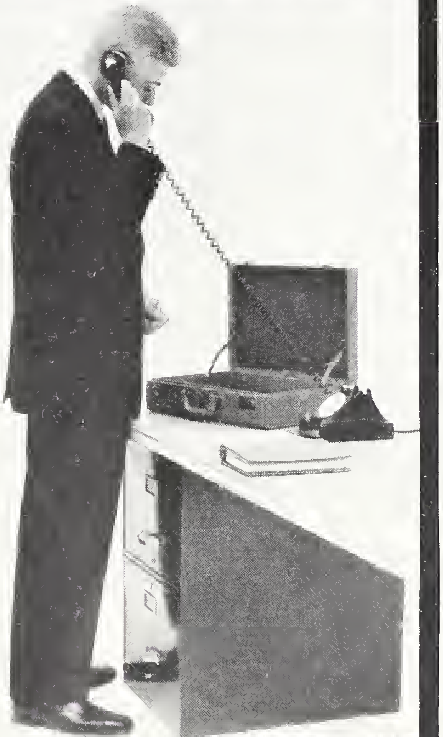
to school . . .
osure advanced[1]



THROMBOPHLEBITIS
back on his feet
in a week after
recurrent episode[1]

REFRACTORY
CELLULITIS
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resumed after 4 days
of VARIDASE[1]

MISSOURI STATE MEDICAL ASSOCIATION

102nd Annual Session

Sheraton-Jefferson Hotel, St. Louis

March 13, 14, 15, 16, 1960

PROGRAM

Sunday, March 13, 1960

1:30 p.m. House of Delegates. Crystal Room.

3:30 p.m. Reference Committee meetings. Rooms 2, 3, 6, 8, Crystal.

Monday, March 14, 1960

9:00 a.m. Refresher Courses:
  Fluid Balance, C. Thorpe Ray, M.D., Columbia. Room 2.
  Common Dermatological Problems, Richard L. Sutton, M.D., Kansas City. Room 3.
  Rheumatic Arthritis, Paul Hagemann, M.D., St. Louis. Room 7.
  Management of Common Obstetric Problems, J. S. Roden, M.D., Columbia. Crystal Room.
  Rectal Bleeding, Francis J. Burns, M.D., St. Louis. Room 8.

10:00 a.m. Intermission to View Exhibits.

10:30 a.m. Newer Concepts in Therapy of Diabetes, Franklin B. Peck, M.D., Indianapolis, Ind.
  Sponsored by the Missouri Diabetes Association.

11:15 a.m. The Early Diagnosis and Treatment of Fat Embolism, Garrett F. Pipkin, M.D., Kansas City.

11:30 a.m. Nervousness and Pheochromocytoma, Warren F. Wilhelm, M.D., Kansas City.

11:45 a.m. Hyaline Membrane Disease, Prophylaxis and Treatment, Daniel B. Landau, M.D., Hannibal.

12:00 noon Committee on Maternal Welfare Luncheon Meeting. Room 9.

2:00 p.m. Surgery of the Common Bile Duct, George A. Hallenbeck, M.D., Rochester, Minn.
  Sponsored by the Missouri Surgical Society.

2:30 p.m. Speaker sponsored by the St. Louis Gynecological Society.

3:00 p.m. Intermission to View Exhibits.

3:30 p.m. Panel: Medical Insurance, To Whom Does the Fee Belong?
  Moderator: A. P. Rowlette, M.D., Moberly.
  Panelists:
    L. V. Mulligan, M.D., St. Louis.
    Carl Moyer, M.D., St. Louis.
    R. O. Muether, M.D., St. Louis
    A. E. Spelman, M.D., Smithville.

4:30 p.m. House of Delegates. Crystal Room.
  Reference Committee Meetings. Rooms 2, 3, 6, 7.

Tuesday, March 15, 1960

9:30 a.m. Panel: Peripheral Vascular Disease.
  Moderator: Ormand C. Julian, M.D., Chicago.
  Panelists:
    Nelson W. Barker, M.D., Rochester, Minn.
    Theodore E. Keats, M.D., Columbia.
    C. Rollins Hanlon, M.D., St. Louis.

10:30 a.m. Intermission to View Exhibits.

11:00 a.m. Pulmonary Emphysema, Hurley L. Motley, M.D., Los Angeles, Calif.
  Question Period. Moderator: Paul Murphy, M.D., St. Louis.

12:00 noon University of Missouri Medical Alumni Luncheon. Gold Room.

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And against the main army of alcoholics—those whose drinking is a symptom of underlying pathology—less than a complete campaign is futile.

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1. To stop their ingestion of alcohol;
2. To detoxify the system;
3. To restore the fluid electrolyte balance;
4. To detect and correct nutritional anomalies peculiar to the individual alcoholic;
5. To overcome or reduce bodily ailments that contribute to the abnormal state and, finally
6. **To develop a program that will aid the particular individual in abstaining from all alcoholic beverages until death.**

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(A portfolio about the Problem of Alcoholism is available upon request).

2:00 p.m. Indications for Open Heart Surgery in Adults, Ormand C. Julian, M.D., Chicago.

2:30 p.m. Management of Children With Diabetes Mellitus, Robert L. Jackson, M.D., Columbia.

2:45 p.m. Recent Advances in Arthritis, Jack Zuckner, M.D., St. Louis.

3:00 p.m. Intermission to View Exhibits.

3:30 p.m. Clinical Pathologic Conference.
Moderator: Carl V. Moore, M.D., St. Louis.
Case Presentation: Hollis N. Allen, M.D., St. Louis.
Discussants:
Don C. Weir, M.D., St. Louis.
Hugh E. Stephenson, Jr., M.D., Columbia.
Maxwell G. Berry, M.D., Kansas City.

7:30 p.m. Annual Banquet in Honor of Past Presidents.
Speaker: Representative Bruce Alger, 5th District, Texas.

Wednesday, March 16, 1960

9:00 a.m. Seminar: Accidents in Children.
Moderator: Neal Middelkamp, M.D., St. Louis.
Burns, Frank S. McDowell, M.D., St. Louis.
Head Injuries, Frank A. Palazzo, M.D., St. Louis.
Poisonings, A. Roger Sharp, M.D., St. Louis.
Fractures, Warren Stamp, M.D., St. Louis.

9:00 a.m. Symposium: Modern Concepts of Treatment of Arteriosclerotic Heart Disease.
Anticoagulant Therapy, Benjamin Manchester, M.D., Washington, D.C.
The Value of Laboratory Tests in Predicting Atherosclerosis, Laurance W. Kinsell, M.D., Oakland, Calif.
Dietary Therapy, Lester M. Morrison, M.D., Los Angeles.
Therapy Influencing the Absorption and Metabolism of Cholesterol, George L. Curran, M.D., St. Louis.
Sponsored by the Missouri Heart Association.

10:30 a.m. Intermission to View Exhibits.

11:00 a.m. Speaker sponsored by the Missouri Society of Internal Medicine.

1:30 p.m. House of Delegates. Crystal Room.

THE MISSOURI SOCIETY OF MEDICAL TECHNOLOGISTS

Thirteenth Annual Convention

St. Louis, Missouri

March 13, 14, 15, 16, 1960

Sunday, March 13, 1960

1:30 p.m. Registration, St. Mary's Hospital, 6420 Clayton Road, Assembly Hall, Ground Floor.

2:00 p.m. Business Meeting, St. Mary's Hospital.

4:30 p.m. Tour of the Laboratory.

6:30 p.m. Buffet Supper, St. Mary's Hospital Dining Room.

8:00 p.m. Business Meeting, Missouri Association of Blood Banks.

SCIENTIFIC SESSION

Sheraton-Jefferson Hotel, Room 1

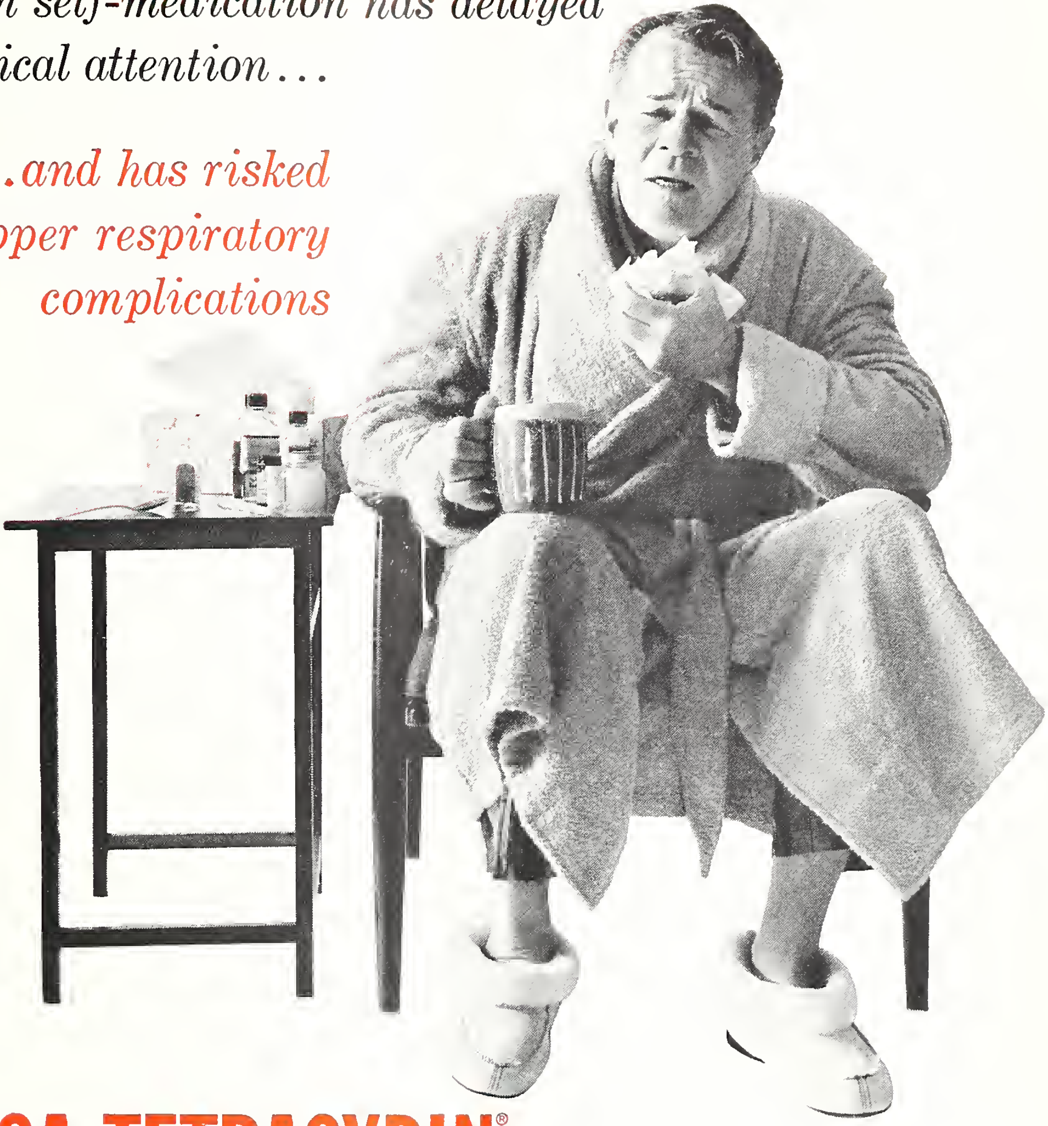
Monday, March 14, 1960

Anne J. Sommer, St. Louis, Presiding
Vincent P. Perna, M.D., Columbia, Alternate

9:00 a.m. Invocation, Reverend Gerald Sommer, Immaculate Conception Parish, West Alton, Missouri.

in the **"COMMON COLD"**
when self-medication has delayed medical attention . . .

. . . and has risked upper respiratory complications



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act quickly to

- *control secondary infection*
- *alleviate cold symptoms*

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phenacetin	120 mg.
caffeine	30 mg.
salicylamide	150 mg.
buclizine HCl	15 mg.

average adult dose: 2 capsules q. i. d.

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9:05 a.m. Medico-Legal Responsibilities of Medical Technologists in the Blood Bank, Charles Wheeler, M.D., Kansas City General Hospital, Kansas City.

10:00 a.m. Coffee Break.

10:15 a.m. Visit Exhibits.

10:30 a.m. Blood Bank Panel Discussion: Record Keeping in the Blood Bank.
Moderator: Fred Coller, M.D., St. John's Hospital, Springfield.
Panel:
Vincent P. Perna, M.D., University of Missouri School of Medicine, Columbia.
Charles Wheeler, M.D., Kansas City General Hospital, Kansas City.
Bernadine Missel, Instructor in Blood Bank Technic, Firmin Desloge Hospital, St. Louis.
Margaret Lohrer, Blood Bank Technologist, Jewish Hospital, St. Louis.

12:00 noon Lunch.

Erline Spickard, Springfield, Presiding
Elizabeth Sandbothe, Koeltztown, Alternate

2:00 p.m. Panel Discussion: Laboratory Diagnosis of Arthritis.
Moderator: George Gantner, M.D., Firmin Desloge Hospital, St. Louis.
Panel:
Jack Zuckner, M.D., St. Louis University, St. Louis.
Carlo Caciolo, M.D., St. Louis University, St. Louis.
Robert Ramsey, M.D., St. Louis University, St. Louis.

3:15 p.m. Coffee Break.

3:30 p.m. Visit Exhibits.

3:45 p.m. Medico-Legal Responsibilities of Medical Technologists in the General Laboratory, Charles Wheeler, M.D., Kansas City General Hospital, Kansas City.

CONFERENCE CLINIC
for
Medical Technology Teaching Supervisors

Sheraton-Jefferson Hotel, Room 8

Monday, March 14, 1960

Genevieve Wood, St. Louis, Presiding

2:00 p.m. Some Responsibilities of Teaching Supervisors in Schools of Medical Technology, Sister John Brendan, St. Joseph's Hospital, Kansas City.

2:20 p.m. Development of Teaching Aids for Approved Schools, Dr. Jeannette Carter, St. Joseph's Hospital, Kansas City.

2:40 p.m. Curricula for Medical Technology Schools, Russell Kerr, M.D., St. Joseph's Hospital, Kansas City.

3:15 p.m. Coffee Break.

3:30 p.m. Visit Exhibits.

3:45 p.m. Criteria for the Selection of Medical Technology Students, L'Nora Wells, Missouri University Hospital, Columbia.

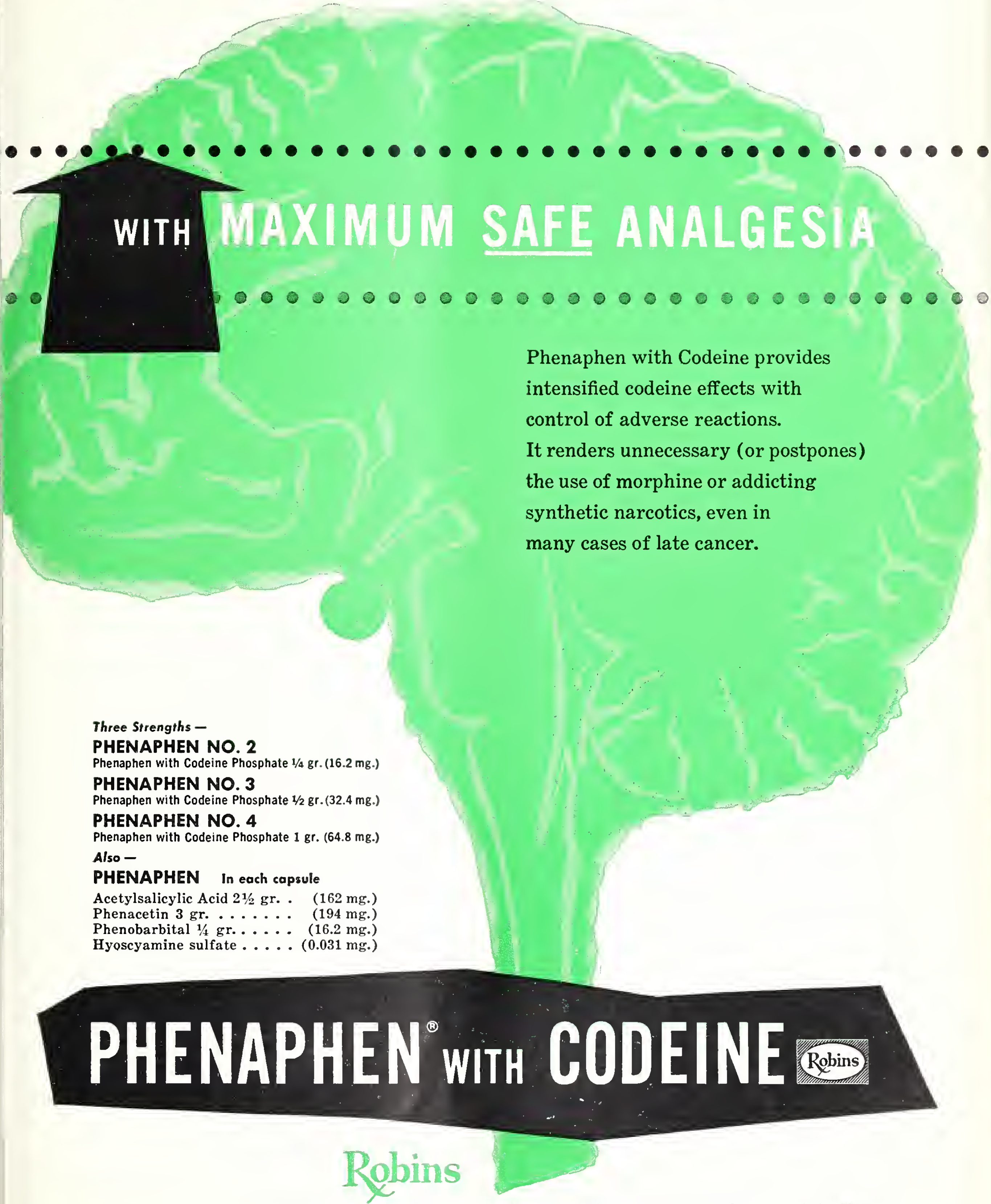
4:00 p.m. Relationship Between College Preparatory and Approved School Programs, Sister M. Dolorosa, S.S.M., St. Louis University, St. Louis.

4:15 p.m. Training the Laboratory Assistants, Julia Hodge, DePaul Hospital, St. Louis.

Tuesday, March 15, 1960

Mary Margaret Kelly, Kansas City, Presiding
Ruby Bell, Columbia, Alternate

9:00 a.m. Serotonin in the Diagnosis of Carcinoid Tumors, John Davidson, M.D., Barnes Hospital, St. Louis.



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9:30 a.m. Chemistry Laboratory Controls, Warren Hansen, Ph.D., St. Louis University Group of Hospitals, St. Louis.

10:00 a.m. Coffee Break.

10:15 a.m. Visit Exhibits.

10:30 a.m. The Whole Organ Micro-Sectioning Technic, Vernon Fisher, St. Louis University, St. Louis. Lecture and Demonstration.

11:15 a.m. Use of the Fluorescent Antibody Technic in the Pathology Laboratory, Peter Soto, M.D., St. Louis University, St. Louis.

12:30 p.m. Lunch, Faculty Dining Room, Des Peres Hall, West Pine and Spring Aves.

2:00 p.m. Tour of the Pius XII Memorial Library, West Pine and Spring Aves.

Mrs. Bebe Eckardt, St. Joseph, Presiding
Sister M. Carmelita Hovenkotter, Maryville, Alternate

3:00 p.m. The New Requirements of the Registry of Medical Technologists (ASCP), Angelo Lapi, M.D., St. Mary's Hospital, Kansas City.

Wednesday, March 16, 1960

Mrs. Ruth Branson, Springfield, Presiding
Frances Wolfskill, Kansas City, Alternate

9:00 a.m. Laboratory Diagnosis of Viral Infections, Jack Barry, M.D., Washington University, St. Louis.

9:30 a.m. The Role of Coagulase Negative Staphylococci in the Production of Disease in the Newborn, Leonard Laskowski, Ph.D., St. Louis University, St. Louis.

10:00 a.m. Coffee Break.

10:15 a.m. Visit Exhibits.

10:30 a.m. In Vitro Technic Used in Differentiation of "Typical" from "Atypical" Acid Fast Organisms, Elizabeth Robben, John Cochran Veterans' Hospital, St. Louis.

10:50 a.m. Uses and Abuses of the Blood Bank, Virgil Loeb, M.D., Barnes Hospital, St. Louis.

11:10 a.m. What Does a Low Hemoglobin Mean? R. O. Muether, M.D., St. Louis County Hospital, St. Louis.

11:40 a.m. Serum Iron Determination, Regina Lotven, St. John's Hospital, Springfield.

ENTERTAINMENT CALENDAR

Sunday, March 13, 1960

6:30 p.m. Buffet Supper, St. Mary's Hospital Dining Room, 6420 Clayton Road.

Monday, March 14, 1960

6:30 p.m. Social Hour sponsored by Ortho, Henrici's Restaurant, Bel Air Hotel, 4636 Lindell Blvd.

7:30 p.m. Banquet, Henrici's Restaurant (Members are guests of the Missouri Society of Clinical Pathologists; non-members $5.75).
Speaker:
Robert Hyland, Manager Station KMOX, St. Louis and Vice-President CBS.

Tuesday, March 15, 1960

12:30 p.m. Luncheon, Faculty Dining Room, Des Peres Hall, West Pine and Spring Aves.

2:00 p.m. Tour of the Pius XII Memorial Library, West Pine and Spring Aves.

7:30 p.m. Annual Banquet in Honor of Past Presidents, Missouri State Medical Association, Sheraton-Jefferson Hotel.

Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Buchanan County Medical Society

The November meeting of the Buchanan County Medical Society was held Wednesday evening, November 4, in the Empire Room of Hotel Robidoux.

The scientific program for the evening was presented by Carleton H. Lee, M.D., allergist of St. Joseph, In discussing allergies, Dr. Lee indicated that even though allergies were mentioned in the Bible and by Hippocrates, it has been only in the last 40 years that the medical profession has actually delved into their origins and treatments.

He indicated that allergies may be caused by many things, some of which are dust, pollens, certain foods and, in some cases, temperature changes. Dr. Lee was introduced by Dr. P. M. Beck, program chairman.

The annual election will be held at the next meeting of the Society in December.

William B. Rost, M.D., *Secretary*

Grand River Medical Society

The regular meeting of the Grand River Medical Society was held Thursday, November 12, at the Hotel Strand, Chillicothe. Seventeen members were present; Mr. Bill Busenbhar, representing Pitman Moore Drug Company, and Dr. Charles Pemberton of Chariton County were guests.

During the social hour a food auction was held by the Auxiliary. Dr. Frank Daley served as auctioneer, and turned in a high score for the A.M.E.F., which receives the proceeds from the auction.

Following a smorgasbord dinner the ladies retired to their own meeting and the Society was addressed by Dr. Eugene L. Bales and Dr. E. Warren Allen, Carrollton, Missouri.

The subject of their paper was "The Management of Difficult Fractures Common to Present Day Accidents." Especial stress was also placed upon the care and treatment of skin and soft tissue injuries.

The paper was well received and an interesting period of discussion followed.

Following the scientific program there was a short business session. The annual election of officers was held. The following candidates were nominated and elected: Dr. Robert Smith, Marceline, President; Dr. C. L. Clark, Trenton, Vice President, and Dr. B. D. Howell, Brookfield, Secretary-Treasurer.

There being no further business, the meeting was adjourned.

William A. Fuson, M.D.
Acting Secretary-Treasurer

SECOND COUNCILOR DISTRICT

J. J. WIMP, KIRKSVILLE, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The Chariton-Macon-Monroe-Randolph County Medical Society met for dinner at the Woodland Hospital in Moberly, Thursday night, November 12. Following the usual excellent meal, the members were privileged to hear an interesting discussion by Dr. Will Fleming, Moberly, who presented the scientific program. He discussed a number of things new in medicine by using 14 subjects and telling of some of the newer experimental work and treatments involved in each subject.

He made an interesting comment concerning the recent controversy over the insecticide used in the cranberry industry supposedly causing cancer to develop in rats. Because of this highly publicized incident, he indicated that probably many people will not buy cranberries this year for Thanksgiving and Christmas. However, he said for years it has been fairly well concluded that tobacco smoking not only causes cancer in rats, but humans that smoke have a definite increased incidence of lung cancer. Yet, said Dr. Fleming, the consumption of tobacco is increasing yearly.

Officers for 1960 were elected as follow: President, Dr. Howard Miller, Macon; Vice President, Dr. Stanley Szymanski, Moberly; and Secretary-Treasurer, Dr. Josephine Baker, Moberly. Members present were: Drs. Baker, W. D. Chute, C. C. Cohrs, Will Fleming, T. S. Fleming, R. M. Hasson, L. E. Huber, A. P. Rowlette, C. C. Smith, Szymanski and R. H. Young, Moberly; Weger, Keytesville; J. E. Campbell, Donald Eggelston and C. Rinker, Macon; F. A. Barnett, Paris; P. V. Dreyer, Huntsville, and G. W. Hawkins, Salisbury.

Josephine Baker, M.D., *Secretary*

Marion-Ralls-Shelby County Medical Society

The Marion-Ralls-Shelby County Medical Society held a dinner meeting at the Mark Twain Hotel in Hannibal on Tuesday evening, November 17.

Following a social hour and dinner, the society members were privileged to hear a fine panel discussion on "Rheumatic Diseases," moderated by R. O. Muether, M.D., St. Louis. In addition to Dr. Muether, the panel members were: Dr. Robert Ramsey, Dr. Jack Tippett, and Dr. Otakar Machek of St. Louis. The panel discussed the following subjects: "Rheumatoid Arthritis," "Gouty Arthritis," "Osteoarthritis," and "Physical Medicine and Rehabilitation in Arthritis."

Informal comments and questions by members of the audience added to this outstanding presentation.

John Walterscheid, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Jefferson County Medical Society

The Jefferson County Medical Society held its monthly meeting at Jefferson Memorial Hospital on October 27, at 8:30 p.m.

Dr. J. Otto Lottes, orthopedic surgeon of St. Louis, and on the courtesy staff of Jefferson Memorial Hospital, gave an interesting and practical discussion on, "The Treatment of Fractures in Children."

The following members were present: Drs. Allbee, Bolgar, Harold Donnell, R. H. Donnell, Kozal, Mayfield, McKinstry, Rice, Rutledge, Senn, Sexauer and Yoskit.

Tasty refreshments furnished by the hospital, as usual, were enjoyed after the scientific program.

John F. Rutledge, M.D., *Secretary*

Meeting of November 17

The Jefferson County Medical Society held its regular meeting at Jefferson Memorial Hospital on November 17, with the following members present: Drs. Mayfield, Kozal, Allbee, Yoskit, Senn, and Rutledge. Dr. Yoskit, Vice President, called the meeting to order at 8:30 p.m.

Mr. Dave Niswonger, Regional Consultant of the Missouri Heart Association, discussed their plans to organize a Jefferson County Chapter and asked that the Acting President appoint a Medical Advisory Committee from the Jefferson County Medical Society.

Dr. Yoskit appointed the following: Drs. John F. Rutledge, J. L. Mayfield, Frank L. Kozal, Thomas Donnell, and Harry Yoskit. Mr. Niswonger also discussed his display of literature which is available to doctors for use in their practice.

Following this, election of officers for 1960 was held. Dr. Kozal nominated Dr. Roger Allbee for President. Dr. Mayfield nominated Dr. Harry Yoskit. Dr. Kozal withdrew Dr. Allbee's nomination and Dr. Yoskit was elected by acclamation. Dr. Mayfield then nominated Dr. J. F. Rutledge for Vice President. There were no other nominations so Dr. Rutledge was elected by acclamation. Dr. Mayfield then nominated Dr. Frank L. Kozal for Secretary. There being no further nominations, Dr. Kozal was elected by acclamation. Dr. Mayfield then nominated Dr. Kozal for Delegate. Dr. Mayfield then nominated Dr. Charles Fallet for Alternate. There were no further nominations so they were elected by acclamation. There being no further business, the meeting was adjourned for refreshments before going home.

John F. Rutledge, M.D., *Secretary*

Lincoln-St. Charles County Medical Society

A dinner meeting of the Lincoln-St. Charles County Medical Society was held at the Southern Air, Wentzville, Thursday evening, November 19.

The evening festivities began with a social hour followed by dinner and then the scientific program.

M. Richard Carlin, M.D., urologist of St. Louis, gave an interesting and informative discussion on, "The Management of Some Common, Troublesome G.U. Problems."

Numerous questions from the audience followed Dr. Carlin's formal presentation.

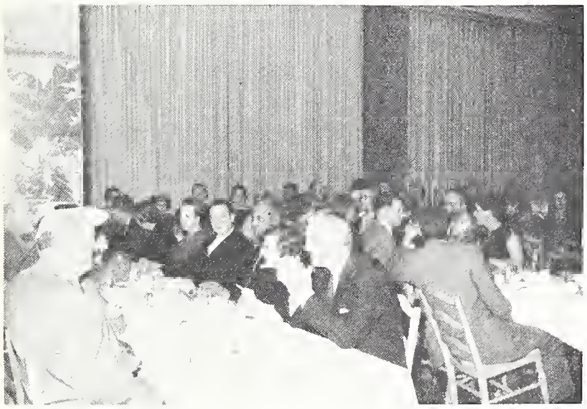
Paul Rother, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT MEETING

BYRON M. STUART, BOONVILLE, COUNCILOR

A dinner meeting of the members of the Fifth Councilor District and their wives was held at the Daniel Boone Hotel in Columbia on Thursday night, November 19. Seventy-two people were present to enjoy the evening's offerings. An enjoyable social hour for both doctors and their wives preceded a turkey dinner. Following these two activities and the introduction of guests and officers, the ladies retired to a separate meeting. They were privileged to have Mrs. Stanley Peterson, Springfield, President of the Woman's Auxiliary to the Missouri State Medical Association, to discuss Auxiliary projects with them. Following Mrs. Peterson's talk, the ladies attended a musical program in the Stevens College Chapel.

Dr. Perry addressed the meeting. Mr. Carter, Dr. Miller and Dr. Stuart were at the speakers' table.



Doctors and their wives enjoyed dinner together.

Speakers, officers and their wives were seated at the head table.

The program for the physicians included addresses by Dr. Ralph Perry, President of the State Medical Association; Mr. Proctor Carter, Director of the Missouri Division of Welfare, and Mr. T. R. O'Brien, Executive Secretary of the State Medical Association. Dr. Perry discussed, "A Few State Medical Association Problems." Mr. Carter spoke on, "The New State Law With Rules and Regulations for the Hospital and Nursing Home Care of Missouri Public Assistance Recipients." Mr. O'Brien discussed, "Blue Shield—Now and in the Future."

Dr. LeRoy Miller, Columbia, President of the Boone County Medical Society, opened the meeting and introduced the guests and officers sitting at the head table. After dinner and following the retiring of the ladies to the separate meeting, Dr. Miller turned the meeting over to Dr. Byron Stuart of Boonville, Councilor of the Fifth District, who introduced the speakers, namely: Dr. Perry, Mr. Carter and Mr. O'Brien.

A general discussion followed the formal talks and concluded the evening program.

BYRON STUART, M.D., *Councilor*

SIXTH COUNCILOR DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

Henry, Johnson, Pettis, Saline County Medical Societies

The dinner meeting of the Henry, Johnson, Pettis, Saline and adjacent County Medical Societies and the doctors' wives was held at the Old Homestead in Sedalia on Wednesday night, November 18.

The evening festivities began with a social

Mrs. Lamy, Dr. Thorpe, Mrs. Peterson, Dr. Hopkins and Mrs. Kelling pose for the photographer.

hour at 6:30 p.m. followed by a tasty smorgasbord and then the evening program.

Following dinner the ladies retired to a separate meeting where they were privileged to have as their guest speaker, Mrs. Stanley Peterson of Springfield, President of the Woman's Auxiliary to the Missouri State Medical Association. Mrs. Jordan Kelling of Waverly, President-Elect of the Woman's Auxiliary was also a guest of the local auxiliaries. Mrs. John Lamy of Sedalia, Vice President of the Pettis County Auxiliary presided at the Auxiliary session and introduced Mrs. Peterson and Mrs. Kelling.

Dr. Thorpe's talk held attention.

The Auxiliary met separately.

The doctors were privileged to hear an interesting presentation by C. Thorpe Ray, M.D., Professor of Medicine and Head of the Department, University of Missouri School of Medicine, on "Diuretic Therapy." Dr. Thorpe was introduced by Dr. Tom Hopkins, President of the Pettis County Medical Society.

Seventy-five people including doctors and their wives and guests were in attendance.

Robert H. Steward, M.D., *Program Chairman*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Jasper County Medical Society

The meeting was called to order by the Vice President, John W. Koehler, M.D., in the absence of the President, Dr. I. T. Craig. Thirty-seven members were present.

Dr. Koehler called for volunteers to give polio shots on December 2 and 3 in connection with the public school immunization program. The following members volunteered to give polio shots on Wednesday, December 2: Drs. Norman Barnett, Attila Nagy, Lewis Ferguson and H. K. Wieman. The following members volunteered for Thursday, December 3: Drs. Ralph Ferguson, Sam Grantham, John L. Beattie and D. O. Allen.

Dr. Koehler informed the Society of the request of Dr. Walter W. Tillman, Jr., 8th District Councilor, that delegates of the Society be urged to attend the 8th District meeting to be held at Mount Vernon on Tuesday, February 9. The members were advised that a resolution had been passed by the Council urging and requesting the Society's delegates and alternates to attend this meeting.

The Vice President announced that, pursuant to direction of the Council, Dr. J. E. Burch had been appointed the Society's representative to negotiate a satisfactory A.M.A. listing in the new telephone directory with the telephone company.

The meeting was then turned over to Dr. W. Russell Smith who introduced the speaker, Dr. John M. Mayer, Jr., whose topic was "Benign Obstructive Lesions of the Lower

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Esophagus." Dr. Mayer illustrated his lecture with slides.

Following Dr. Mayer's talk, the Society resumed its business session. Dr. Papp, Editor of the *Tri-State Medical Bulletin*, informed the members of the resolution passed by the council requesting that members cooperate with the Society's magazine group to encourage advertisers to patronize the *Bulletin* by writing personal letters to advertisers as per a list to be furnished the members by Dr. Papp.

Following a general discussion on the polio immunization program in Jasper County, Dr. Papp moved in substance that the Society's policy in regard thereto be as follows:

Immunization programs for the truly indigent be done without charge insofar as services of the members of the Society are concerned. That the Society, however, does not endorse the carrying out of free immunization programs regardless of whether the individuals treated are indigent or not.

Following a discussion of this proposed motion, Dr. Graves moved that the motion be tabled. The motion to table was carried by a majority vote, whereupon B. E. DeTar, Sr., M.D., moved that the motion proposed by Dr. Papp be submitted to the council for further study and appropriate action, which was carried by majority vote.

Dr. David O. Allen conveyed to the members the thanks and appreciation of the Woman's Auxiliary for their help in making the Auxiliary's box supper a great success.

A general discussion was held concerning the nature of programs to be presented before the Society. It was agreed that Dr. Allen, the program chairman, should discuss this matter with Dr. Birsner, President-Elect, so that arrangements for satisfactory programs could be made well in advance.

There being no further business to come before the meeting, on motion duly made and carried, the meeting adjourned.

DAVID ALLEN, M.D., *Secretary*

Ozarks County Medical Society

On Tuesday night, October 13, the Ozark Medical Society met in the Rainbow Dinner House in Cassville, as guests of Drs. Mary Newman and C. H. Price. There were 33 members and guests present.

The scientific program covered the diagnosis and treatment of diseases of the thyroid, including thyroiditis, hyper and hypo metabolism, and the use of radioactive iodine in diagnosis and treatment. The program was presented by Dr. F. T. H'Doubler, Jr., of Springfield.

An enthusiastic discussion followed the formal presentation.

A. J. GRAVES, M.D., *Secretary*

Meeting of November 10

The Ozark Medical Society held its November meeting at Zeke's Cafe in Aurora on Tuesday evening, November 10. Forty members and guests were present.

Dr. W. E. Wooldridge, Springfield, presented the scientific program and spoke on, "The Use of Griseofulvin." This subject was well presented and greatly appreciated by the audience. A question and answer period followed.

At the business meeting that followed, several matters were discussed, including a letter from the Councilor, Dr. Tillman, confirming their plans to have the 8th Councilor District meeting on the second Tuesday in February, 1960, in Mount Vernon, at the Missouri State Sanatorium.

A. J. GRAVES, M.D., *Secretary*

Greene County Medical Society

The regular meeting of the Greene County Medical Society was held November 27 at the Kentwood Arms Hotel with 46 members and two guests present. The President, Dr. J. G. Siceluff, presided.

On motion by Dr. Cochran, seconded by Dr. Ivy, the minutes of the October 23 meeting were approved as published in the *Bulletin*.

Dr. Siceluff announced that in accordance with the By-Laws, the annual business meeting will be held the third Friday of December, December 18, 1959.

The following report was received from the Nominating Committee:

Mr. President and Members of the Greene County Medical Society:

The By-Laws, Rules and Regulations of the Greene County Medical Society require the Nominating Committee to submit, at the November meeting, one nominee for each vacancy to be filled at the Annual Election to be held at the December Regular Meeting. Pursuant to these instructions, your Committee presents the following nominees: President-Elect, John P. Ferguson, M.D.; Secretary, F. T. H'Doubler, Jr., M.D.; Treasurer, William F. Johnson, M.D.; Councilor for one year term expiring in 1960 (to fill the unexpired term of Dr. James T.

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Good), Eugene J. Schwartz, M.D.; Councilor for a three year term expiring in 1962 (to replace Dr. Wm. F. Johnson), F. Thomas Moseley, M.D.; Councilor for a three year term expiring in 1962 (to replace Dr. Thomas E. Ashley), Stanley S. Peterson, M.D.; Councilor for a two year term (to replace Dr. John P. Ferguson), G. Bruce Lemmon, Jr., M.D.; For Delegates to the M.S.-M.A., Drs. Stanley S. Peterson, John P. Ferguson and Kenneth E. Knabb; For alternate Delegates to the M.S.M.A., Drs. Arch Lowe, Jr., F. T. H'Doubler, Jr., and Don F. Gose.

To serve as the three members at large on the Nominating Committee, serving with Drs. Siceluff, Elkins and Schwartz next year, your Committee nominates Drs. Thomas E. Ashley, E. M. Powell and G. Bruce Lemmon, Jr. Respectfully submitted by the Nominating Committee, composed of R. Ned White, M.D., Chairman, E. J. Schwartz, M.D., Ronald F. Elkins, M.D., M. D. Bonebrake, M.D., Jerry H. Allen, M.D., and R. C. Conrad, M.D.

Dr. Siceluff announced that further nominations from the floor for these vacancies were in order. There were none and he announced that additional nominations will be in order at the December meeting, at which time the election will be held.

Dr. Don Overend introduced Herbert A. Wenner, M.D., Research Professor of Pediatrics at the University of Kansas School of Medicine, who discussed "Polio—Kansas City, 1959."

Dr. Siceluff expressed appreciation to Dr. Wenner for his appearance before the Society.

There being no further business, the meeting was adjourned.

G. Bruce Lemmon, Jr., M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler, Wayne and Ripley County Medical Society

The Butler, Wayne and Ripley County Medical Society had their regular monthly meeting at the Hickory House on November 30, a dinner meeting with Dr. T. E. Ruff, President, presiding.

Dr. R. C. Englehardt, the chairman of the program committee, reported on the recent survery, of which there have been 33 returns of the questionnaires sent. The consensus of opinion was that dinner meetings were preferred, these alternately to be held at the Hickory House and Northwold as before. Type of program selected was diversified with local panel, local single speaker and guest single speaker being almost in equal preference.

There was no new business to be brought up. There were 15 members present and Dr. Richard Boone, Doniphan, was a guest.

Mr. James A. Kerns, Jr., St. Louis, was the speaker, his title being "Investments." This was a well received program. Mr. Kerns, being a broker, was able to answer many questions which were brought up after his formal discussion.

The meeting adjourned at 10:00 p. m.

E. T. Hansbrough, M.D., *Secretary*

ALCOHOLISM TO RECEIVE ATTENTION

With the plan for an alcoholic treatment and research center at Malcolm Bliss Hospital in St. Louis and a state-wide survey by the department of psychiatry of Washington University and the State Division of Health, the study of alcoholism with some definite goals is imminent. The survey will study ways to prevent and control chronic alcoholism. A progress report on the survey was made to Governor Blair in November.

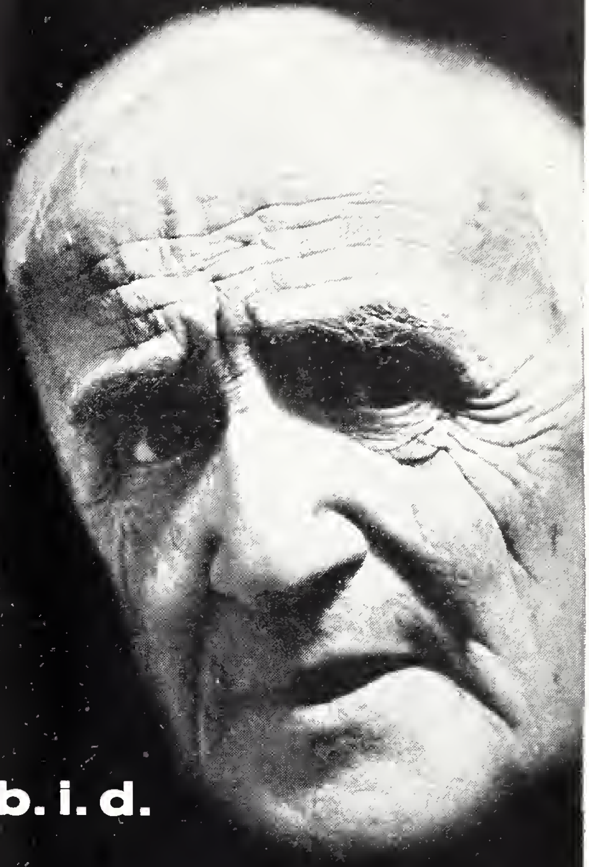
The treatment center at Malcolm Bliss Hospital is planned as a 32-bed unit, with facilities to treat 600 alcoholics a year.

DR. DOOLEY RETURNS TO LAOS

Thomas A. Dooley, M.D., medical missionary in Laos and a member of the St. Louis Medical Society, returned to Laos on December 4, following many appearances in the St. Louis area and receiving of many honors and gifts.

December 2 was proclaimed "Dr. Thomas A. Dooley Day" by the mayor of St. Louis. On that evening Dr. Dooley addressed an overflow crowd at a dinner meeting sponsored by the St. Louis Junior Chamber of Commerce. Keys to a light airplane purchased with public donations were presented to Dr. Dooley. Dr. Dooley said acquisition of the airplane will enable the opening of at least two more hospitals in the mountainous jungles of Laos.

Dr. Dooley returned from Laos to undergo surgery for chest cancer and to raise money for foreign medical mission work.



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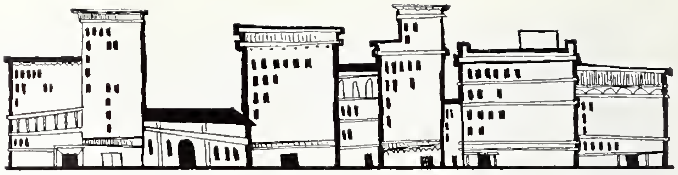


WASHINGTON UNIVERSITY

Election, Honors

Dr. Sidney Velick, associate professor of biological chemistry, was elected president of the Washington University Medical Society at the November meeting. Newly elected vice president of the society, which is composed of all students and faculty members of the Medical School, is Dr. Sol Sherry, professor of medicine. Dr. Lillian Recant, associate professor of medicine and of preventive medicine, was elected secretary. Society council members, also elected at the November meeting, are Dr. Albert Roos, associate professor of physiology; Dr. Samuel Guze, associate professor of psychiatry and assistant professor of medicine; Dr. Gordon Schoepfle, associate professor of physiology, and Dr. Frank A. Riddick, assistant in medicine.

Six undergraduate students received awards for excellence in scholarship during the 1958-59 school year. David Danoff, Baltimore, Md., received the $50 George F. Gill prize and the $50 Kehar S. Chouke prize for superior work in anatomy during his freshman year. Stuart A. Kornfeld, Olivette, a sophomore, was awarded the $50 Biochemistry Prize for excellence in that field. The Roche Award, a watch and scroll given in recognition of outstanding scholarship during the first two years of Medical School, was received by Philip W. Majerus, Quincy, Ill., a junior student. Majerus also received the Howard A. McCordock Book Prize for general excellence in pathology. Gustav Schonfeld, East St. Louis, a senior, was awarded the $100 Alexander Berg Prize for presenting the best results in research in bacteriology during the 1958-59 school year. The Alumni Scholarship Award of $200 for general excellence in work during the preceding year was shared by David T. Hammond, Bluffton, Ind., and Joe R. Utley, Elk City, Okla., both senior students.

Two faculty members discussed research conducted recently at the Medical School. "Ingestion of Protein by Intestinal Cells" was reported by Dr. Sam Clark, Jr., assistant professor of anatomy; and Dr. Anthony P. Fletcher, assistant professor of medicine, presented a paper on "An Enzymatic Approach to the Therapy of Thrombo-Embolic Disease." This research was conducted in collaboration with Norma Alkjaersig, research assistant professor of medicine, and Dr. Sol Sherry, professor of medicine.

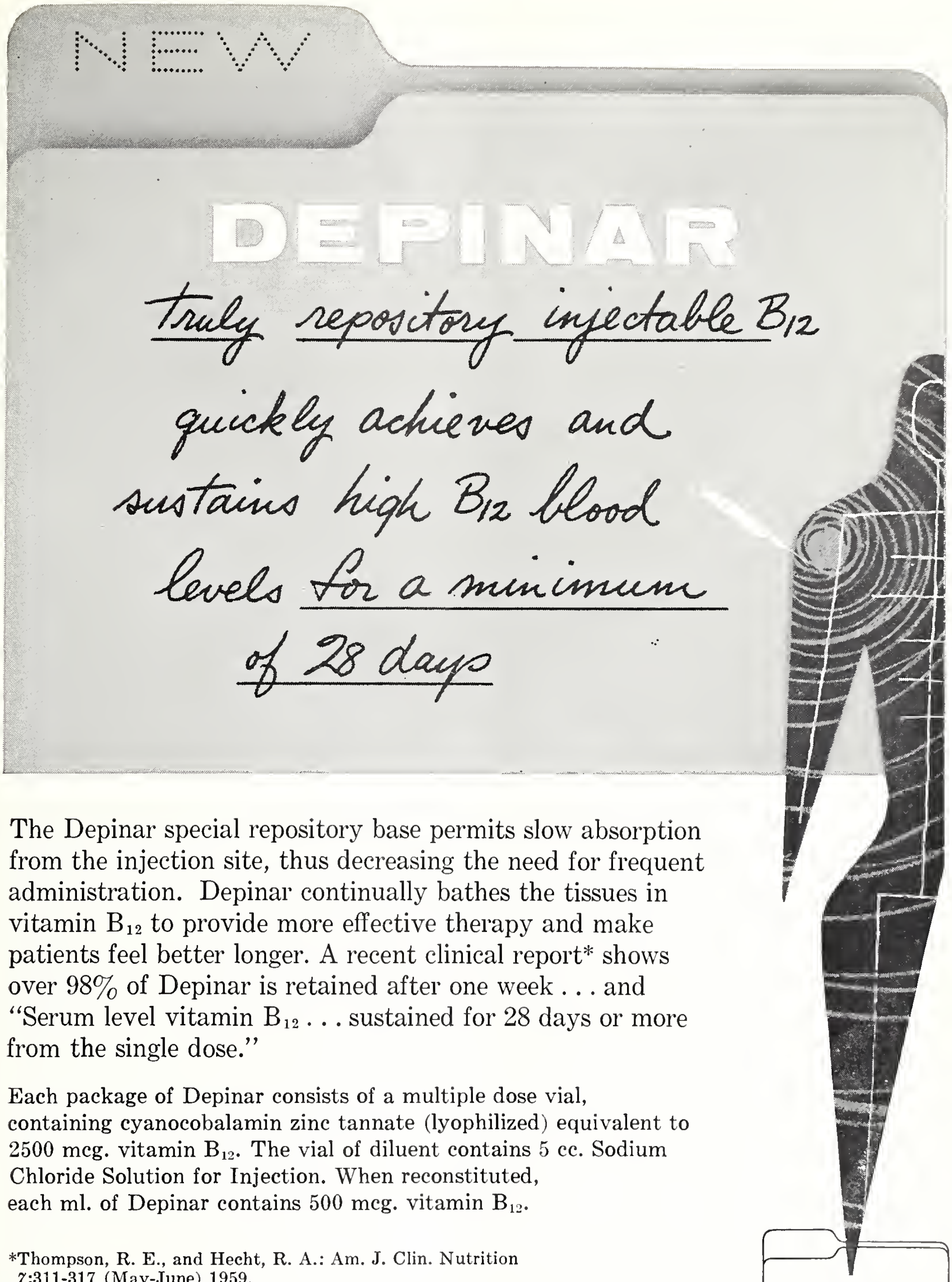
Auditorium Dedicated

The new Schwarz Auditorium at St. Louis Maternity Hospital in the Barnes Hospital-Washington University Medical Center was dedicated in November when portraits of the late Drs. Henry and Otto H. Schwarz, in whose honor the auditorium is named, were unveiled. Members of the Department of Obstetrics and Gynecology at Washington University School of Medicine have donated a bronze name plate and a bronze plaque commemorating the Schwarzes for "their untiring efforts and devotion to medical education and research." Dr. Henry Schwarz was the first professor of obstetrics at the Medical School, serving from 1899 until 1921. Although professor emeritus, he was acting head of the Department of Obstetrics from 1921 to 1927, and a member of the staff until the time of his death in 1935. Dr. Schwarz's son, Dr. Otto H. Schwarz, was the second professor of obstetrics, and a staff member until his death in 1950. The Schwarz Auditorium, located on the first floor of St. Louis Maternity Hospital, is being used as a lecture room by members of the obstetrics and gynecology department. Dr. John E. Hobbs, associate professor of clinical obstetrics and gynecology, gave the dedication introduction. Biographical sketches of Drs. Henry and Otto were given by Drs. Otto S. Krebs, and Richard Paddock, assistant professors of clinical obstetrics and gynecology. Dr. Willard M. Allen, professor and head of the department of obstetrics and gynecology, dedicated the auditorium to the use of Washington University. Accepting for the University was Dr. Edward W. Dempsey, dean of the Medical School.

Lectures

A lecture on virus hepatitis was given in November by Professor Shelia Sherlock of the Department of Medicine of London's Royal Free Hospital. The lecture was in connection with a meeting of the St. Louis Pathology Society.

Also in November, Dr. Theodor Rosebury, professor of bacteriology at Washington University School of Dentistry, delivered a lecture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*Thompson, R. E., and Hecht, R. A.: Am. J. Clin. Nutrition 7:311-317 (May-June) 1959.

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sponsored by the Medical Education for National Defense group at Washington University School of Medicine. Dr. Rosebury discussed biological warfare and the Pugwash Conferences. He was a participant in the 5th Conference of International Scientists at Pugwash, N. S., which concerned biological and chemical warfare. From 1943 to 1945 he was project chief at Camp (now Fort) Detrick, Md. Dr. Rosebury is the author of three books, "Bacterial Warfare" and "Experimental Air-borne Infection," which were published in 1947; and "Peace or Pestilence," published in 1949.

Dr. R. O. K. Schade of Durham University, England, discussed principles, technic and results of gastric cytology during a November lecture. Dr. Schade is senior lecturer in the department of pathology at King's College, Durham University, and assistant pathologist at Royal Victoria Infirmary, Newcastle upon Tyne. He studied medicine and dentistry at the Universities of Konigsberg and Wurzburg and received the degree of doctor of medicine from Durham University.

New Grants

Five Washington University School of Medicine staff members have received new research grants from the United States Public Health Service totaling $79,385. Largest new grant of $30,300 was awarded Dr. Robert M. O'Neal, assistant professor of pathology for a study of factors involved in the production of infarcts of the heart in man and in experimental animals.

A $20,723 new grant to Dr. Robert E. Kuhlman, fellow in orthopedic surgery, will be used to study the localized biochemical changes which regulate the formation of normal bone. Microchemical technics, which have been extensively developed at the Medical School, will be used in an comparison study of minute normal and diseased bone and cartilage specimens weighing less than one ten millionth of an ounce in an effort to determine the fundamental causes of deformity and bone disease. The work will be done in collaboration with Dr. Fred C. Reynolds, professor of orthopedic surgery.

Dr. John C. Herweg, assistant professor of pediatrics, has been awarded a $14,922 new grant for research to determine the causes of pyloric stenosis.

Dr. George D. Sorenson, instructor in pathology, received a new grant of $9,300 to study certain aspects of immunity through use of the electron microscope. Alterations in animal lymphoid tissues associated with antigen stimulation and antibody production will be analyzed.

A $4,140 grant to Dr. Marshall Conrad, instructor in clinical orthopedic surgery, will finance a study to determine the best operative technic to produce spinal fusion. Many operative technics have been previously described, but no controlled laboratory study has ever been done to evaluate the results.

Two new training grants were also awarded to the Medical School by U. S. Public Health Service. Dr. Eli Robins, professor of psychiatry, received $35,800 for the psychiatry and neurology research training program.

Dr. E. James Anthony, Blanche F. Ittleson professor and director of the William Greenleaf Eliot Division of Child Psychiatry, was awarded $32,885 for the training program in child psychiatry.

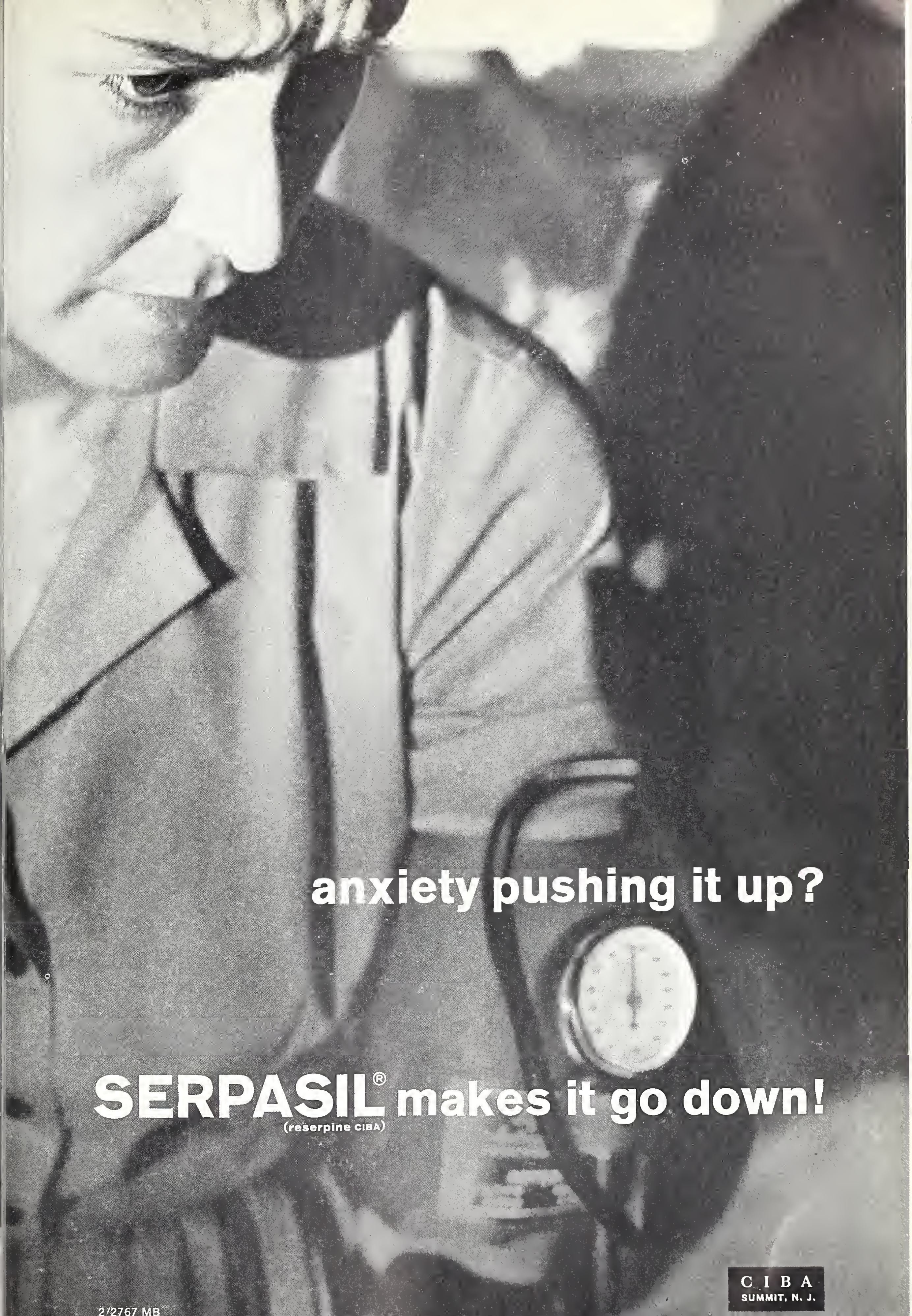
Dr. Carl G. Harford, associate professor of medicine, received a supplemental award of $12,216 for the allergy and infectious disease training program and $88,905 in renewal grants was received to continue research projects already in progress.

Dr. Robert M. Burton, assistant professor of pharmacology at Washington University School of Medicine, has been awarded a $49,500 research grant from the National Science Foundation. An effort will be made to determine how the myelination process is initiated and terminated and what part certain enzymes and nucleotides play in normal development and in neurological disease process. Assisting Dr. Burton will be Dr. Paul Mandelstam, and Dr. Luis Garcia, research fellows in pharmacology.

UNIVERSITY OF MISSOURI

Meetings and Talks Held at the Medical Center

The West Central States Biochemical Conference held its second annual conference October 30-31, 1959, on the University of Missouri campus. Approximately 500 people participated. The meeting was sponsored by the Department of Biochemistry of the School of Medicine with members of the departments of agricultural chemistry, chemistry, horticulture, zoology, entomology, botany, microbiology, physiology, veterinary physiology, medicine, pediatrics, and poultry husbandry participating. The meeting was an informal gathering for anyone engaged or interested in biochemistry and related fields "to get acquainted, to present their work, and to learn what their neighbors are doing." Graduate students, educators, and non-academicians from industries and the professions concerned with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biochemistry were invited to submit papers to the conference.

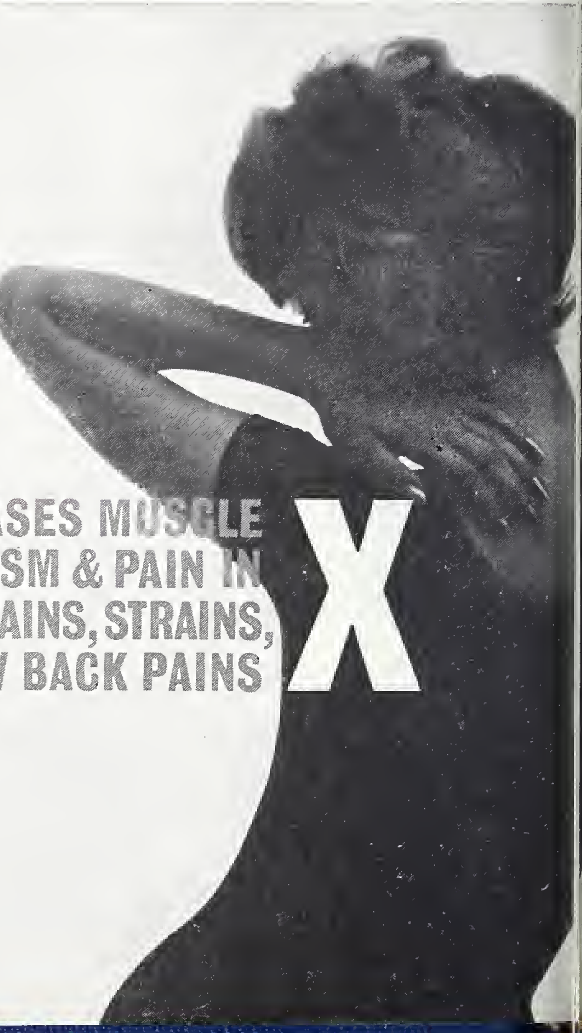
The conference opened at 6:30 p.m. October 30 with a dinner in Memorial Student Union. Dr. Vernon E. Wilson, Dean of the School of Medicine, extended a welcome to the group prior to the University Assembly Lecture Series address by Dr. Severo Ochoa, of the Biochemistry Department at New York University. His topic was his research in nucleic acid synthesis.

Dr. Severo Ochoa, one of the two winners of the 1959 Nobel Prize for medicine, discussed the scientific aspects of the research that led to the discoveries important to a better understanding of the basic processes of life, in an Assembly Lecture at the University of Missouri. It was because of those discoveries that Dr. Ochoa, now Professor of Biochemistry at the New York University College of Medicine, was awarded the prize, along with Dr. Arthur Kornberg, Professor at Stanford University, who also made the discoveries. Dr. Ochoa and Dr. Kornberg discovered the biological synthesis of the nucleic acids, and his talk here was titled "Biosynthesis of Nucleic Acids." In his lecture Dr. Ochoa explained that "Because of the genetic function of DNA (deoxyribonucleic acid) and RNA (ribonucleic acid) in the synthesis of proteins, knowledge of the mode of synthesis and replication of nucleic acids in the cell is of great value for a better understanding of some of the most basic processes of life."

The University Section of the American Chemical Society, which this academic year is observing its 50th Anniversary, sponsored a social hour after the lecture.

On October 31 the program included the presentation of scientific papers, coffee and science demonstrations for women participants, a lunch and tours of the campus and Columbia, and a business meeting.

The papers, whose authors represent five states, were presented at the University Medical Center at morning and afternoon meetings October 31. Five papers were presented at a general meeting in the Medical Center Auditorium starting at 9:00 a.m. Ten others were read at two concurrent section meetings following the general meeting. The remaining 24 papers were read before three concurrent sections in the afternoon, eight papers being scheduled for each section. The authors included graduate students, faculty members, and staff members from some 12 universities and institutions or industrial organizations. Thirteen of the papers were prepared by members of the University of Missouri staff in



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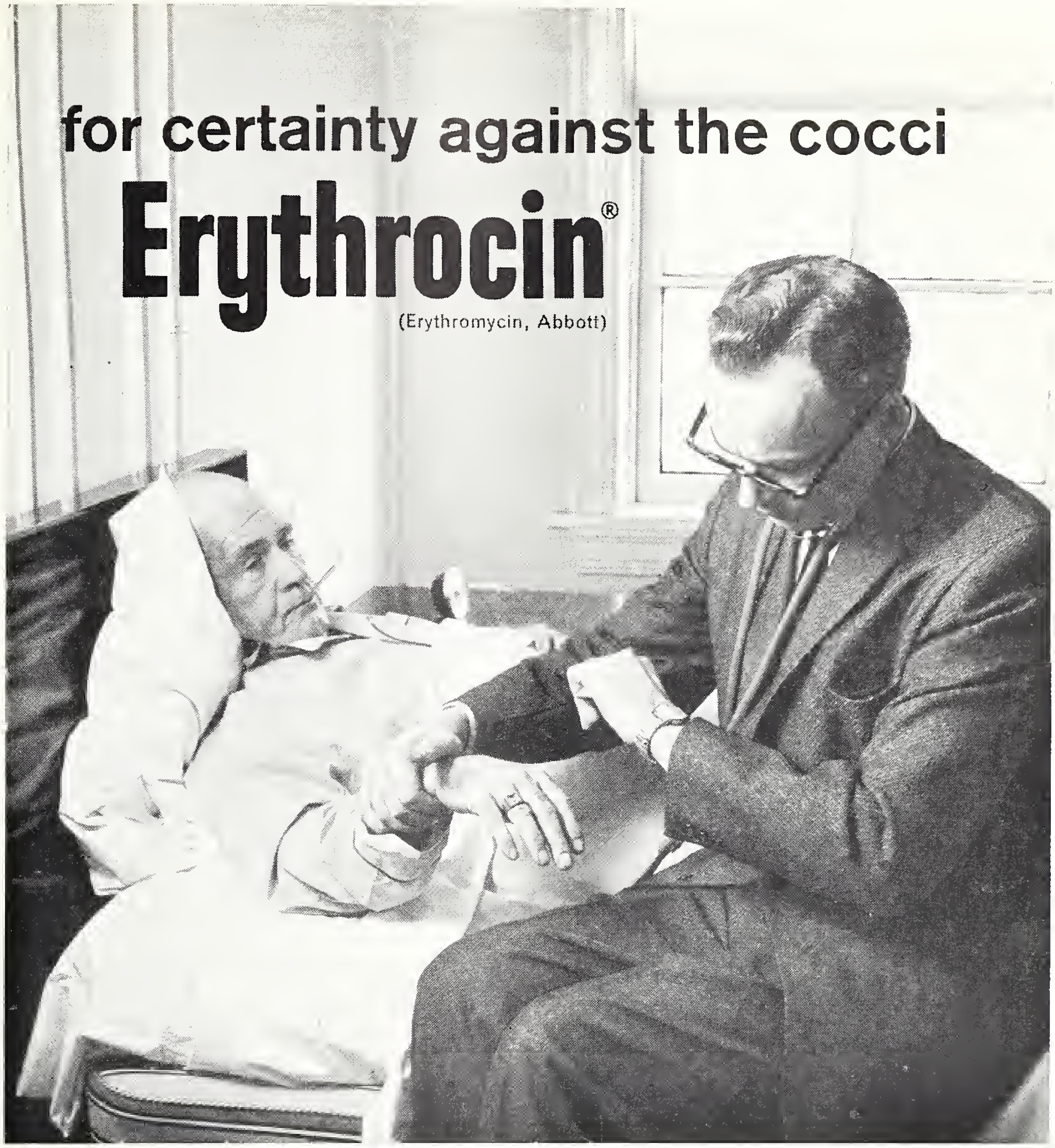
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various departments; twenty-two, including those from this campus, were prepared by Missourians.

The officers of the West Central States Biochemical Conference included: The Chairman, Dr. Thomas Luckey, Professor and Chairman of the Biochemistry Department at the University of Missouri; the secretary was Dr. Daniel F. Millikan, Assistant Professor of Horticulture at the University; Vice-Chairman was Dr. Robert Feeney, Chairman of Biochemistry at the University of Nebraska; and the Treasurer was Dr. Arnold White, Assistant Professor of Biochemistry at the University of Missouri. Dr. Owen J. Koeppe, Associate Professor of Biochemistry at the University of Missouri was Program Chairman, and Dr. John Franz, Assistant Professor of Biochemistry at the University of Missouri, was in charge of housing and tours.

A Workshop for Public Health Nurses entitled "The Public Health Nurse—A Mental Health Resource" was held November 10-13, 1959, at the University of Missouri Medical Center. The workshop was made possible by funds from the National Institute of Mental Health specifically allocated through the Technical Assistants Project Grant and was co-sponsored by the University and the Missouri State Division of Health.

Workshop participants included nurses from the Missouri Division of Health and from the faculty of the University School of Nursing. Mrs. Jean Hofmann, Instructor in Nursing, served as a group recorder.

Miss Pearl Shalit, Chief Mental Health Nurse, Community Services Branch, National Institute of Mental Health, served as Moderator of the program, which included addresses on various aspects of the general theme as well as group discussions. In addition, a dinner was held at the Student Union for the group. A field trip to State Hospital No. 1 at Fulton was also a part of the program.

Additional University faculty participants were: Dr. Gwilym S. Lodwick, Associate Dean of the School of Medicine; Dr. Clement Brooke, associate professor of pediatrics; Dr. H. Guhleman, Jr., mental health consultant of the Division of Health of Missouri; Dr. Arthur Robins, professor of social work, and Dr. Rod Kabrick, associate professor of clinical psychology.

Dr. C. Gordon Stauffacher of Sedalia addressed the Medical History Group on November 12 in the Medical Center Auditorium. His topic was "Postage Stamps and Medicine." Slides of many medical subjects portrayed on stamps were shown.

Dr. Gwilym S. Lodwick, Associate Dean and professor and chairman of the Department of Radiology, was guest speaker at a meeting of the Fortnightly Club held in the Medical Center Auditorium on November 18. Dr. Lodwick's topic was "Atoms in Medicine."

Trips and Talks

At the capping exercises for nursing students held in Jesse Auditorium on Sunday, October 25, Dr. Lodwick spoke to the group on "Nursing in Modern Society." Dr. Lodwick also attended a series of meetings sponsored by the Association of American Medical Colleges held October 27-30 in Chicago, during which time he served as recorder for the 1959 Technical Institute which was a pre-conference session of the AAMC.

Dr. Frank B. Engley, Jr., Assistant Dean and professor and chairman of the Department of Microbiology, presented a talk entitled "Air Borne Infection and the Hospital Environment" at a meeting of the American Public Health Association held in Atlantic City, New Jersey, in mid-October. Dr. Engley also participated in a meeting of Continuing Group on Medical Student Affairs and attended the meetings of the Association of American Medical Colleges held in Chicago October 31-November 4.

Dr. James T. Barrett, associate professor of microbiology, presented a scientific research paper entitled "Fermentative Enzymes of Bacillus macerans" at the West Central States Biochemical Conference October 30 and 31.

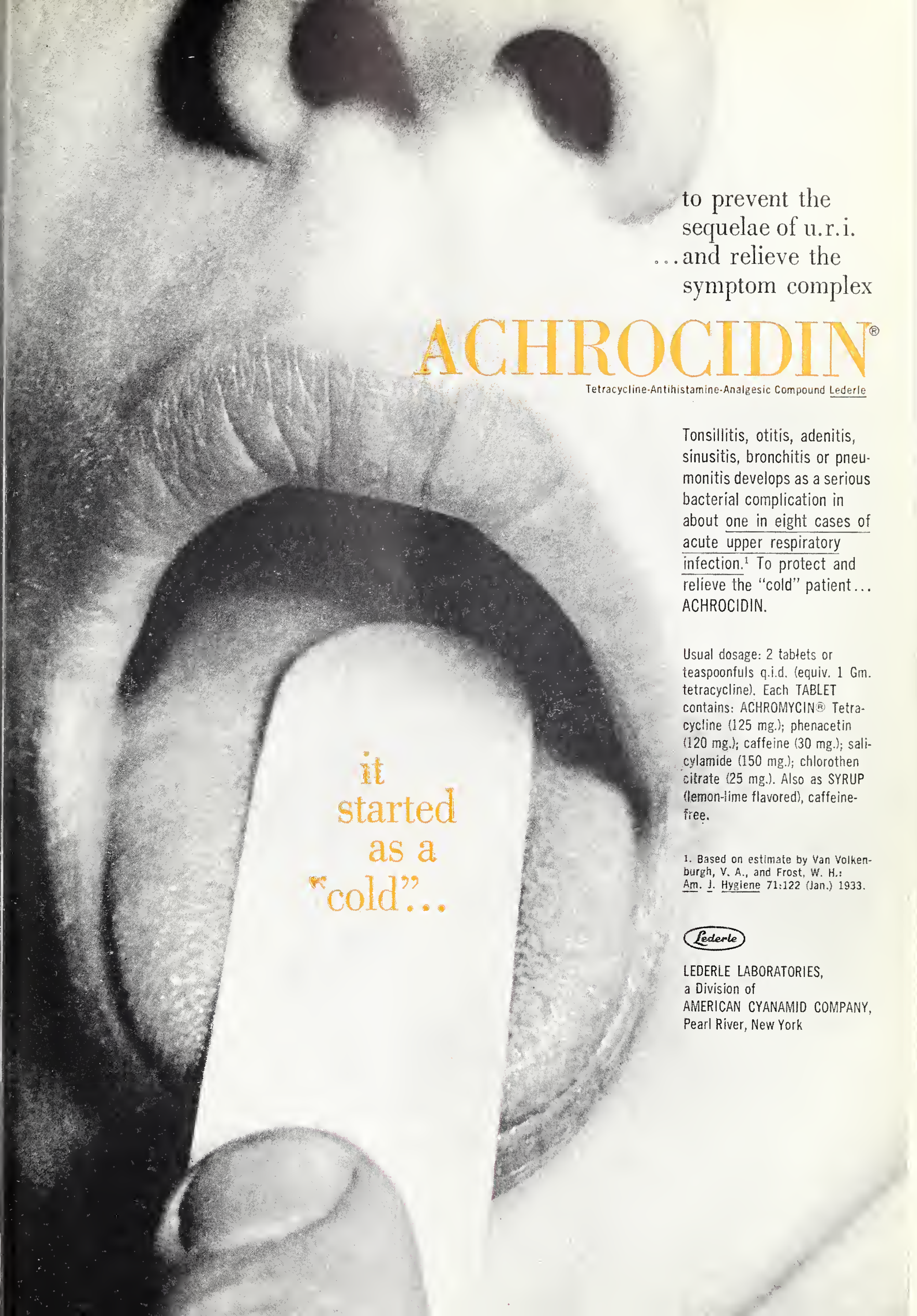
Dr. Herbert S. Goldberg, associate professor of microbiology, attended a meeting in Washington, D. C. from November 2 to 6 sponsored by the Food and Drug Administration, at which time he presented a paper on "Untoward Reactions in Humans From Application of Antibiotics in Plant Disease Control."

Dr. Michael H. Ivey, assistant professor of microbiology, attended a Tropical Medicine and Hygiene meeting October 28-31 in Indianapolis.

Dr. David Hall, professor of obstetrics-gynecology, presented a talk, "Prolonged Labor" at a meeting of the Missouri Academy of General Practice in St. Louis on November 7.

Dr. Joseph Flynn, professor and chairman of the Department of Pathology, participated in a discussion of problems of undergraduate teaching at a meeting held in Houston, Texas, November 12-13, 1959, which was sponsored by the Cancer Coordinators for Undergraduate Teaching of Cancer.

Dr. Vincent P. Perna, assistant professor of pathology and assistant director of Central Pa-



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[1] Based on estimate by Van Volkenburgh, V. A., and Frost, W. H.: Am. J. Hygiene 71:122 (Jan.) 1933.

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thology Laboratories, participated in a technical seminar on "Antibody Determination" November 3-7 in Chicago, which was sponsored by the American Association of Blood Banks.

On October 26 Dr. Robert L. Jackson, professor and chairman of the Department of Pediatrics, and Dr. Fikri M. Hanna, assistant professor of pediatrics, presented a progress report on the study of water metabolism in the newborn and young infant at a meeting in New York City of the Nutrition Research Committee and Advisory Committee on Protein of the Evaporated Milk Association. Suggestions were given by the advisory board of the Evaporated Milk Association regarding extension of their work and collection of more data concerning changes in body composition with diet and age.

Dr. Jackson served as moderator in a symposium on "Infant Nutrition" at the Cornell Medical Center in New York on October 27. The Council on Foods and Nutrition of the American Medical Association was the sponsoring group, and papers from this meeting are to be published in the *Journal of the American Medical Association*. While in New York, Dr. Jackson also attended a meeting of the Nutrition Committee of the American Pediatric Society on October 28 and a meeting of the Infant Nutrition Committee of the National Research Council at which time plans were made for future activities.

Dr. Clement E. Brooke, associate professor of pediatrics; Dr. Harold Lischner, instructor, and Dr. Roy Westerfeld, assistant instructor, attended a meeting in Iowa City on October 26, sponsored by the American Academy of Pediatrics, at which problems in medical education served as the main topic of discussion. They also participated in meetings of the Mid-West Society for Pediatric Research which was also being held in Iowa City on October 26-27. At this meeting Dr. Brooke represented the University in the organization of a new scientific society, and Dr. Lischner presented a paper on "Association of Chloramphenicol Administration With Early Neonatal Death."

Dr. Dallas K. Meyer, professor of physiology, presented a paper at the West Central States Biochemical Conference on October 31. Dr. Meyer's paper was entitled "Cardiac Glycogen of Rats During and Following Acute Anoxia."

On November 6 Dr. Thelma Trombly, assistant professor of speech, participated in a meeting of

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indications: RELA is most beneficial in those conditions of the musculoskeletal system manifesting pain, stiffness and spasm.

safety: Studies of more than 1400 patients indicate that the toxicity of RELA is exceptionally low. In human subjects, respiratory, blood pressure or blood chemistry changes and/or renal, hepatic or endocrine dysfunction have not been reported.

dosage: The usual adult dosage of RELA is one tablet 3 times daily and at bedtime. RELA has a rapid onset of action, with relief usually apparent within 30 minutes, and persisting for at least 6 hours.

supply: RELA is available as 350 mg., pink, coated tablets in bottles of 30.

1. Kuge, T.: To be published.

H-227

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the executive council of the Missouri Speech and Hearing Association in St. Louis. Plans for the year 1959-60 were made.

Dr. Gwilym S. Lodwick, professor and chair- of the Department of Radiology, presented a refresher course on lung cancer during the week of November 15-20 in Chicago at a meeting sponsored by the Radiological Society of North America. At this meeting Dr. Lodwick also participated on a panel for film interpretation.

Dr. Donald Cochran, assistant professor of radiology, recently attended the 2nd Annual Symposium on Cinefluorography held in Rochester, New York, and a meeting of the Radiological Society of North America in Chicago.

Dr. Hugh E. Stephenson, professor and chairman of the Department of Surgery, was a guest at a conference held by the Division of Biology and Medicine of the U. S. Atomic Energy Commission and the Medical Department of the Brookhaven National Laboratory on October 26-27 in Upton, New York. Under discussion by the Commission was the present and future usefulness and place of nuclear medicine in surgical practice and research. Dr. Stephenson also attended the 1959 Meeting of Markle Scholars which was sponsored by the John and Mary R. Markle Foundation, and held October 28-31 at Litchfield Park, Arizona. On November 11, Dr. Stephenson presented a talk "The Surgical Management of Occlusive Arterial Disease" in connection with a course on Peripheral Vascular Disease, which was sponsored by the St. Louis Medical Society, the course being part of a Postgraduate Medical Study.

Dr. Samuel P. W. Black, professor of neurosurgery, recently attended the meeting of the Congress of Neurological Surgeons in Miami, Florida, and from there he went to New Haven, Connecticut, where he visited Yale University to discuss mutual investigative efforts concerning experimental aneurysms.

Dr. John Holmes, assistant professor of orthopedic surgery, attended the fall meeting of the St. Louis Orthopedic Society on October 21 in St. Louis. "Current Studies in Trauma" was the topic for discussion.

Dr. John H. Landor, assistant professor of surgery, attended the St. Louis County Medical Society meeting held in St. Louis on November 2.

Dr. Ian Thompson, assistant professor of urology, attended the Kansas City Urological Association Meeting on October 28.

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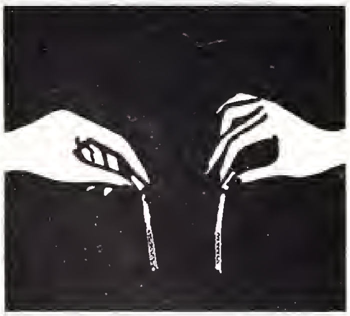

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"... an efficient and convenient means of dealing with the problem of acute agitation in alcoholic intoxication ... important was the absence of noticeable respiratory depression. ..."

Miller, R. F.: Clin. Rev. 1:10 (July) 1958

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Recent guests in the Department of Surgery included the following: Dr. C. Rollins Hanlon, professor and chairman of the Department of Surgery, St. Louis University School of Medicine, who conducted Grand Rounds; Dr. Claude J. Hunt of Kansas City, past president and founder of the Missouri Surgical Society, who conducted Grand Rounds; Dr. Roy Mason, ophthalmologist from St. Louis, who lectured on "Glaucoma and Cataracts"; Dr. Carl A. Moyer, Bixby professor and chairman of the Department of Surgery at Washington University School of Medicine, who lectured and conducted Grand Rounds; Dr. Charles Sherwin of the Department of Surgery at St. Louis University School of Medicine and secretary for the St. Louis Medical Society, who lectured and conducted Grand Rounds; Dr. H. B. Stauffer, ophthalmologist of Jefferson City, who lectured on "External Diseases of the Eye." Other guests included Dr. James A. Bennett, plastic surgeon of the Department of Surgery, University of Texas, and Dr. Jim Waterfield from Falls Church, Virginia.

Gifts and Grants

A grant awarded by the Missouri Heart Association and the St. Joseph Heart Council in the amount of $4,957.20 for support of research entitled "Studies on the Effect of Specific Aldosterone Antagonists on Sodium Space and Metabolism in Controls and Hypertensives" will be under the direction of Dr. C. Thorpe Ray, professor and chairman of the Department of Medicine, and Dr. Thomas W. Burns, associate professor.

Dr. Wesley Platner, professor of physiology, has been awarded a grant by the University of Missouri Research Council.

Dr. Herbert S. Goldberg, associate professor of microbiology, and Dr. D. Blenden, instructor in veterinary bacteriology and parasitology, will be the project directors of a grant for $14,611 from the Department of Health, Education and Welfare for their research in "Epidemiologic Studies on Leptospirosis."

A grant in the amount of $22,000 has been awarded by the National Science Foundation to Dr. Owen J. Koeppe, associate professor of biochemistry, for studies in "Mechanism of Action of Glyceraldehyde-3-Phosphate Dehydrogenases."

Dr. Arthur Merrick, associate professor of physiology, has been awarded a grant of $5,000 by the Public Health Service National Heart Institute. The grant is for a continuation of his study on the nervous and cardiac tissue glycogen.

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membranes
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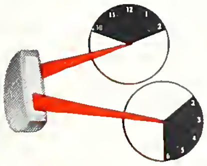

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Each timed-release Triaminic Juvelet® provides: ½ the formulation of the Triaminic Tablet.

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1. Fabricant, N. D.: E.E.N.T. Monthly *37*:460 (July) 1958.
2. Lhotka, F. M.: Illinois M. J.: *112*:259 (Dec.) 1957.
3. Farmer, D. F.: Clin. Med. *5*:1183 (Sept.) 1958.

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New Appointments

Fred V. Lucas, M.D., has been appointed professor of pathology effective July 1, 1960. Dr. Lucas received his A.B. in 1942 from the University of California and his M.D. in 1950 from the University of Rochester. He is presently in the Pathology Department at the College of Physicians and Surgeons of Columbia University.

Harry G. Stoeckle, M.D., has been appointed associate professor of pediatrics effective January 1, 1960. Dr. Stoeckle received his M.D. in 1944 from the Medical College of Virginia. He is presently a member of the staff at the University of Texas Medical Branch in Galveston.

Robert T. Dale, M.D., has been appointed assistant instructor and first year resident in pathology effective July 1, 1960. Dr. Dale received his B.A., B.S., and M.D., the latter in 1959, all from the University of Minnesota.

William T. Griffin, M.D., has been appointed assistant instructor and first year resident in obstetrics and gynecology effective July 1, 1960. Dr. Griffin is a graduate of the University of Missouri School of Medicine, class of 1959. He is presently interning at Parkland Memorial Hospital in Dallas, Texas.

Herbert J. Schmidt, M.D., has been appointed assistant instructor and first year resident in obstetrics and gynecology effective July 1, 1960. Dr. Schmidt received his M.D. degree from the University of Missouri School of Medicine in 1959. He is presently interning at University of Virginia Hospital in Charlottesville.

Robert D. Williams, M.D., has been appointed assistant instructor and first year resident in pediatrics effective July 1, 1960. Dr. Williams received his M.D. degree in 1959 from Missouri. He is presently interning at Gorgas Hospital in the Canal Zone.

SAINT LOUIS UNIVERSITY

Awards

The School of Medicine's first chair in psychiatry has been establishd by Mrs. Harriet Frost Fordyce, St. Louis philanthropist, who has announced a $1,050,000 gift to Saint Louis University. Four hundred thousand dollars of the amount will be used for the establishment of an endowed professorship in psychiatry in honor of the late Samuel Fordyce, St. Louis attorney, who died in 1949. The balance will be for unrestricted use of the school.

Dr. Edward A. Doisy, Jr., professor of bio-

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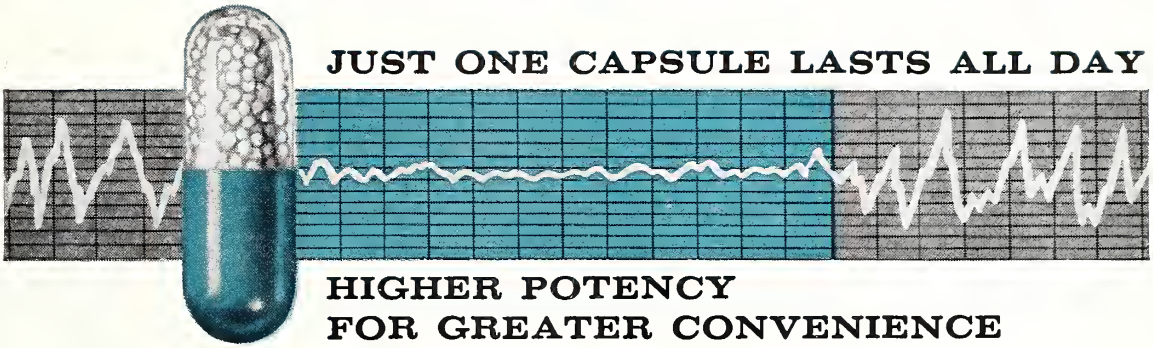

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chemistry, has been awarded a $5,400 grant renewal from the Nutritional Foundation for studies on the nutritional influence upon bile. Dr. Doisy and his research associates are investigating the influence of dietary components on liver function. Their research is concerned with the analysis of bile collections from animals placed on diets similar to those causing deficiency diseases in the human being.

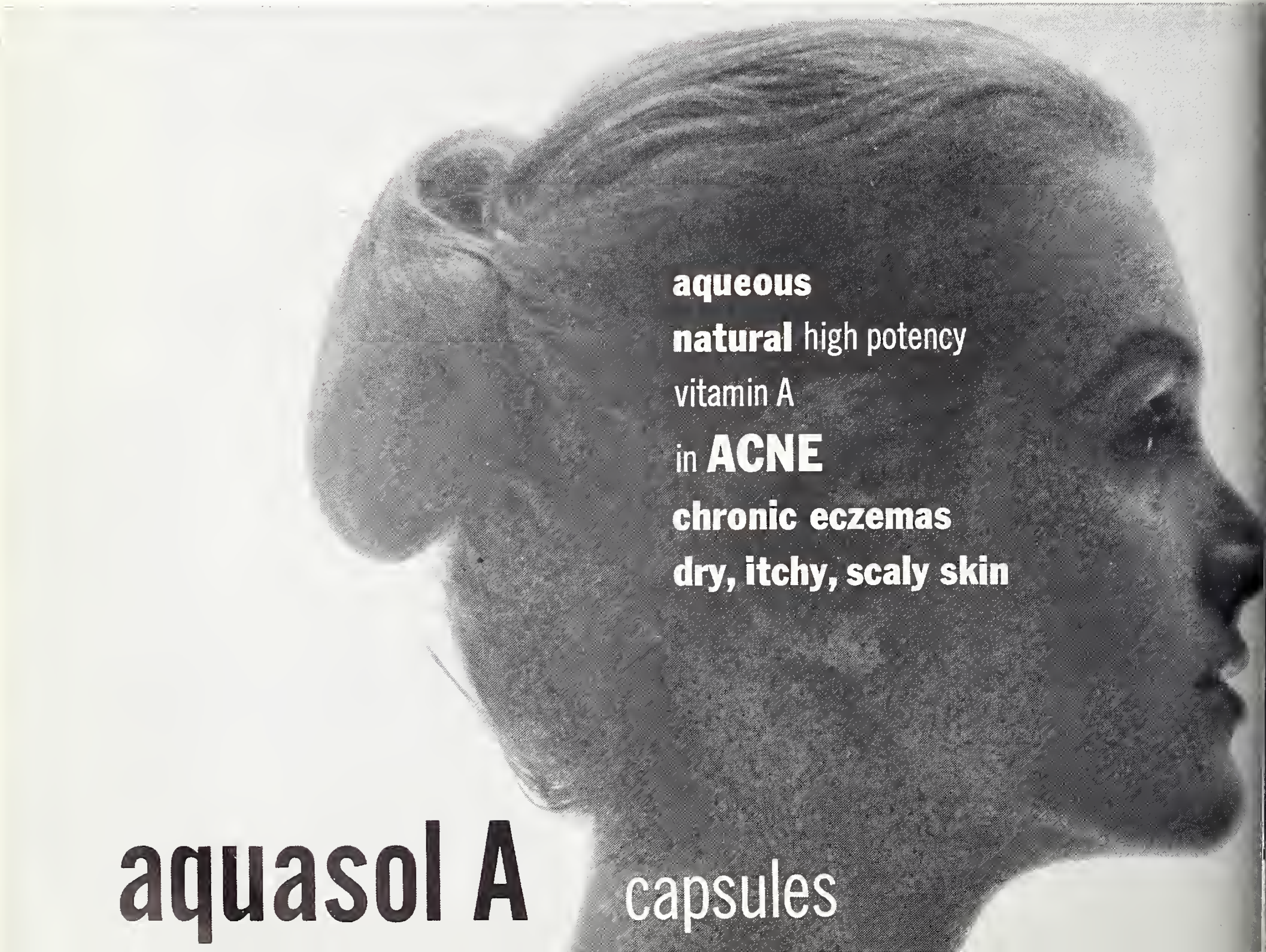
A $12,000 Christmas gift to the National Fund for Medical Education was made last month by Carling Brewing Company on behalf of its wholesalers in the United States to assist the National Fund in its program of extending financial support to the nation's 82 accredited medical colleges. In St. Louis, Dr. James W. Colbert, Jr., dean of the St. Louis University School of Medicine, accepted a check for $2,000 in behalf of NFME. The money will be redistributed to the nation's medical schools by NFME.

Honors

Two University alumni, who have contributed to the field of medical science, were awarded alumni merit awards during the Founders Day Student Convocation held November 23. Six members of the medical faculty, who have been associated with the University for 25 years were recipients of service awards.

Recipients of alumni awards were: Dr. Robert J. Huebner, chief of the laboratory of infectious diseases, National Institute of Allergy and Infectious Diseases, National Institute of Health, Bethesda, Md., and Dr. Wilfred W. Westerfield, professor of biochemistry and director of the department of the State University of New York at Syracuse. Dr. Huebner is an alumnus of the University's School of Medicine, having received his doctor of medicine degree in 1942. One of the country's outstanding authorities in viruses, he is also medical director in the regular corps of the U. S. Public Health Service. Dr. Westerfield is an alumnus of the University's Graduate School, having received the doctor of philosophy degree in biochemistry in 1938. A former dean of the medical school of the State University of New York, he is the author of more than 60 publications in the field of biochemistry.

The Alumni Merit Award was established in 1955 to give recognition to distinguished graduates who are exemplifying to an eminent degree in their daily lives the Credo of the University.



Recipients of service awards were Drs. William H. Bailey, senior instructor in opthalmology; Peter G. Danis, professor of clinical pediatrics; Edward L. Dorsett, assistant professor of clinical gynecology and obstetrics; Armand D. Fries, instructor in otolaryngology; Joseph B. Grindon, assistant professor of clinical dermatology, and Dr. Paul C. Schnoebelen, assistant professor of clinical radiology.

Appointments

Dr. Morton M. Weber has been appointed assistant professor of microbiology. He came to the University from Harvard Medical School where he was instructor of bacteriology and immunology from 1956 until recently. Prior to that time he was a postdoctoral fellow of the American Cancer Society at the McCollum-Pratt Institute of the Johns Hopkins University and instructor of microbiology at the Johns Hopkins School of Medicine.

Dr. Weber started his teaching career as an instructor of zoology and parasitology at St. Francis College in Brooklyn in 1949 after receiving his bachelor of science degree in biology from the College of the City of New York. He was awarded a doctor of science degree from the Johns Hopkins University School of Hygiene and Public Health in 1953. His research interests are in physiology and biochemistry and the mechanisms involved in microbial pathogenicity. His current research is a continuation of investigations started at Harvard and involve a study of possible role of vitamin K as an intermediate in the transport of cellular energy.

John B. Warner has been appointed administrator of Firmin Desloge Hospital, the main teaching hospital of the School of Medicine. Mr. Warner succeeds Sister Mary Clementia, S.S.M., who will remain the Sister Superior of the Sisters of St. Mary associated with the hospital in the special hospital departments and on the nursing service divisions. Mr. Warner has been associated with the University since 1955, when he was appointed associate director of Firmin Desloge. He was assistant administrator at St. John's Hospital from 1951 to 1955 and administrator of Memorial Hospital at Nashville, Arkansas, from 1948 to 1951. He is an alumnus of the University, having been awarded his bachelor of science degree in hospital administration in 1954. Mr. Warner is an instructor in the University's department of hospital administration.

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1. Davidson, D. D. and Sobel, A. E.: J. Invest. Derm. 12:221, 1949.

LEO H. POLLOCK, M.D.

Missouri Medicine in Review

FORTY YEARS AGO

Perryville lost eight citizens in one week during a recent typhoid epidemic.

The Jackson County Medical Society has increased the amount of annual dues from $6 to $12.

Leo H. Pollock, M.D.

Dr. Willard Bartlett of St. Louis was elected president of the Southern Surgical Association at the annual meeting held in New Orleans, December 16-18.

When Dr. Jefferson Davis Griffith of Kansas City rounds out a half century of active practice next March, the Jackson County Medical Society will celebrate the event by tendering a banquet to him. The society has already appointed a committee to make adequate arrangements for honoring Dr. Griffith on March 4.

The coal famine of last month was responsible for the postponement of the postgraduate meetings at Mexico and Chillicothe. All arrangements had been made and an excellent program had been prepared for each meeting but the shortage of coal and the disarranged train schedules made it impractical to hold the meetings. The councilors of the districts expect to keep the programs as prepared until a more propitious time.

Dr. Robert Mueller of St. Louis, Lieutenant in the Medical Corps of the Navy, has been awarded the Navy Cross for distinguished service, while acting as battalion surgeon of the Second Battalion, Sixth Regiment, U. S. Marines during the Meuse-Argonne offensive Nov. 1 to 11, 1918.

With the completion of Volume XVI in December, 1919, our Journal closed a satisfactory year notwithstanding the disturbed conditions in

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[2] Reports (1959) to the Squibb Institute for Medical Research.

aturētin —*Indications:* in control of edema when diuresis is required, in congestive heart failure, the premenstrual syndrome, nephrosis and nephritis, cirrhosis with ascites, edema induced by drugs ertain steroids); in the management of hypertension, used alone, combined with Raudixin (Squibb auwolfia Serpentina Whole Root), or with other antihypertensive drugs, such as ganglionic blocking agents.

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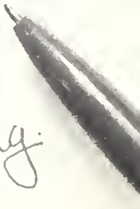

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the advertising field and the large increase in the cost of publishing all periodicals. The price of paper, printing materials and labor has advanced more than 100 per cent over the cost of these items in 1915. The cost of the paper would have been considerably higher if we had not been the beneficiaries of the courtesy of the American Medical Association, which has been printing our Journal for several years, one newspaper it is said having been issued with its news printed on rough wrapping paper.

TWENTY-FIVE YEARS AGO

Twenty-six members of the St. Louis Medical Society who have completed fifty years of practice were honored at a meeting of the Society November 27. The address of the evening was presented by Rabbi Julius Gordon, St. Louis. The remainder of the program was informal. Friends and families of physicians attended the meeting. The members who were honored for their long service were: Drs. Carl Barck, Louis C. Boisliniere, Henry S. Brookes, James A. Dickson, Meyer J. Epstein, William A. Fries, Frandis R. Fry, Joseph Grindon, Moses E. Haase, Willis Hall, Eugene F. Hauck, Louis Hauck, Moses W. Hoge, George A. Humpert, Bransford Lewis, Heine Marcks, Fred W. Patton, Amand Ravold, Francis Reder, Henry Schwarz, George N. Seidlitz, Max C. Starkloff, Paul F. Basterling, John W. Vaughan, Benjamin A. Wilkes and Henry L. Wolfner, Dr. Carr Lane a former member of the Society was a guest. He also has spent fifty years in the practice of medicine in St. Louis.

The dates of the 1935 Annual Session to be held in Excelsior Springs have been set by the Council as Monday, Tuesday, Wednesday and Thursday, May 6, 7, 8, and 9. The General Committee on Arrangements appointed by the Council consists of Dr. Spence Redman, Platte City, chairman; Dr. A. J. Welch, Kansas City, and Dr. W. T. Elam, St. Joseph. This Committee appointed Dr. Joseph V. Dauksys, Exeelsior Springs, as chairman of the Local Committee on Arrangements. Dr. Dauksys will select the members for the various subcommittees.

TEN YEARS AGO

John Zahorsky, M.D., Steelville, was granted an emeritus fellowship by the American Academy of Pediatrics at a recent meeting of the Academy held in San Francisco.

Andy Hall, Sr., M.D., Mount Vernon, Illinois, was named "outstanding general practitioner of the year" by the American Medical Association. Dr. Hall is the father of Andy Hall, Jr., M.D., St. Louis.

MISSOURI STATE MEDICAL ASSOCIATION

102nd Annual Session
March 13, 14, 15, 16
1960

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Please see program
on page 64

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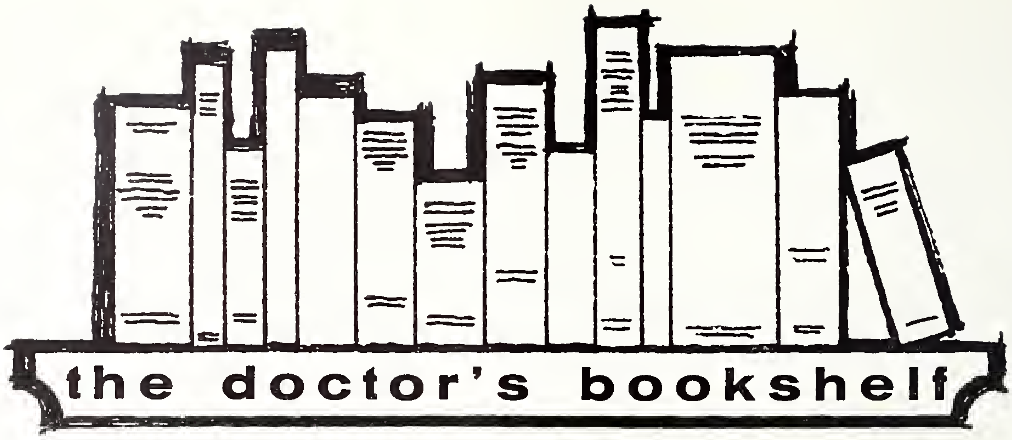

the doctor's bookshelf

BOOK REVIEWS

Emergency Treatment and Management, by Thos. Flint, Jr., M.D., Director, Division of Industrial Relations, Permanente Medical Group, Oakland and Richmond, California; Chief, Emergency Department, Permanente Medical Group Kaiser Foundation Hospital, Richmond, California. Second Edition. W. B. Saunders Company, Philadelphia and London, 1958. Price $8.00.

The first edition of this almost pocket-sized thesaurus of concisely written, carefully indexed, practical treatment and management of medical emergencies was copyrighted in 1954. The second edition apparently was necessitated to include the use of the newer modi of management such as improved antibiotics, plasma expanders, resuscitators, which all are aware has occurred with great rapidity in the past four years. Specifically, the most important additions of new or modified methods in this edition include barbiturate intoxication, cardiac arrest, cold injuries, diving injuries, vasopressor resistant shock, arterial damage, and an important section on pediatric emergencies emphasizing nose conditions in which there is marked difference in the treatment of infants or children as opposed to adults.

The pentagonal perspective of the author improves the value and practical application of the book's contents, namely: (1) Medical offices, clinics and hospitals experience a constant stream day and night of acutely ill and injured persons. (2) There is probably more opportunity to salvage life, limb and function going unfulfilled among these patients than in any other category of medical practice. (3) In emergency situations, the physician is faced with the necessity of making what may be vital decisions quickly with a minimum of laboratory aid, consultation or solemn contemplation. (4) Physicians including interns and residents often are confronted with emergency situations outside their field of experience or training. (5) The staggering increase in medical malpractice proceedings as applicable to the management or mismanagement of medical emergencies.

It is most unusual for any two physicians to agree completely on all phases of management in every medical situation to which they may be mutually exposed. Hence, as any one who would peruse or ponder this book with a critical eye, I find some points particularly in my professional field of endeavor, where I am not in complete agreement. However, basically these are not of great magnitude. One need only refer to the author's prefacing statement, "The methods of treatment suggested are not necessarily the only proper therapeutic methods but they are based upon several years of experience in the handling of a large volume of emergency cases as well as upon accepted methods of emergency care."

Though the book is small in dimensions, of great importance is its editing. Physicians who only occasionally handle emergencies will find it an indispensable guide, whereas those who work commonly among emergency patients will be pleased to find almost every possible contingency covered from "abdominal pain" to "x-ray indications." The alphabetical sequence of subjects in this book is an excellent idea for what actually is a medical emergency reference book. No time is lost thumbing through the fine print of an index which with its characteristic location in a book often gets badly defaced or misplaced through use or abuse!

One final point of emphasis that stimulates enthusiasm in the book is a section concerning administrative, clerical and medical legal principles and procedures. Gratifying indeed is the enlightenment gleaned from this section of the book. In summary, I would certainly recommend that a

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copy of this book be placed for immediate access in every hospital emergency room and doctors' offices where medical emergencies are seen.

G. K. L.

SCHIZOPHRENIA, by Manfred Sakel, M.D. Philosophical Library, New York. Price $5.00.

There is an unquestionable historical and clinical value in this volume "which describes the achievement of one of the truly important figures in the field of psychiatry." Thus, Professor Hoff of Vienna refers to Dr. Sakel in the foreword. The author's significant contribution to psychiatry, the insulin shock treatment, is carefully analyzed and described with presentation of clinical examples that illustrate many of the varied circumstances that a psychiatrist may find in applying this successful but rather empirical method of treatment.

The first part of the book which is devoted to the study of etiology, symptomatology and psychopathology of schizophrenia is rather antiquated, since some of the theoretic considerations presented are somewhat naive and lack the possibility of scientific confirmation.

The author admits the absence of objective pathologic and anatomic postmortem findings but states that in schizophrenia the newly acquired pathways are affected by the disease and they can be modified by this treatment. The neurotropic function of insulin is differentiated from its metabolic function.

There is a careful description of the four faces of insulin shock treatment, the possibilities of "wet shock" and "dry shock," the way of handling each and their indications. The association of convulsive therapy to insulin therapy is analyzed, especially with reference to the use of Metrazol. Complications occurring during shock such as hyper-salivation, pulse irregularities, tonic spasms of the extensor muscles, and other decerebration symptoms are considered and the author warns the practitioner about them since they will be indicators of irritation of the midbrain cells. Sakel states "that a most important factor of the whole treatment is the duration time of the hypoglycemia." He considers the wet shock as the one which has the most curative effect, the dry shock being helpful in endogenous depression and catatonic stupor.

"Activation of psychosis" is the residual psychotic trait present between insulin treatments or during the treatment. This condition is emphasized and recommended as a gauge to establish when a patient should be considered cured. According to the author, as long as slight psychotic symptoms still remain the patient is still sick, and should continue in treatment. Phenomena such as aphasia, psychotic reactions during hypoglycemia and hysterical reactions, are carefully analyzed with precise recommendations to the clinician on how to handle these complications. Sakel considers that amnesia should be avoided and it should not occur in a properly managed treatment.

In the classification of the clinical forms of schizophrenia he follows mainly Kraepelin, with some modifications. He introduces a new type which he calls "hypochondriac type" to which he dedicates only a few lines in this book, but which he considers as having the worst prognosis. He thinks that paranoia is a manifestation of the schizophrenic disease process and not a separate nosologic entity. Sakel considers that he demonstrated "the physiologic nature of psychiatric disorders beyond any possibilities of doubt," paradoxically admitting that he was unable to find any correlation between the biochemical and clinical data during the insulin shock treatment.

The book lacks demonstrable scientific data, there are no statistics whatsoever and references are made by mentioning the author's name without bibliographic citations. Even though the theoretic considerations are out of date the clinical part of the book, with the careful description of all the events that may occur during the insulin shock treatment, is an unquestionable contribution to the field of somatic treatment in psychiatry.

M. K.

THE VISUAL FIELDS. A TEXTBOOK AND ATLAS OF CLINICAL PERIMETRY, by David O. Harrington, M.D., Clinical Professor of Ophthalmology, University of California School of Medicine; Consultant in Opthalmology, U. S. Veterans Administration Hospital, Fort Miley, San Francisco, California. With 234 Illustrations and 9 Color Plates. The C. V. Mosby Company, St. Louis, 1956. Price $16.00.

Dr. Harrington has skillfully presented basic data of anatomy, physiology, pathology, and the long-established technics of the visual field examination. He maintains a well-balanced, practical outlook. He stresses the importance of a careful examination, which can usually be done with simpler equipment. In addition, he presents and evaluates some of the newer apparatus including flicker fusion fields and the multiple pattern method of visual field examination. The illustrations are excellent.

This will be especially valuable to all ophthalmologists, but will also serve as a reference to those in other branches of medicine.

W. R. E.

(Continued on page 120)

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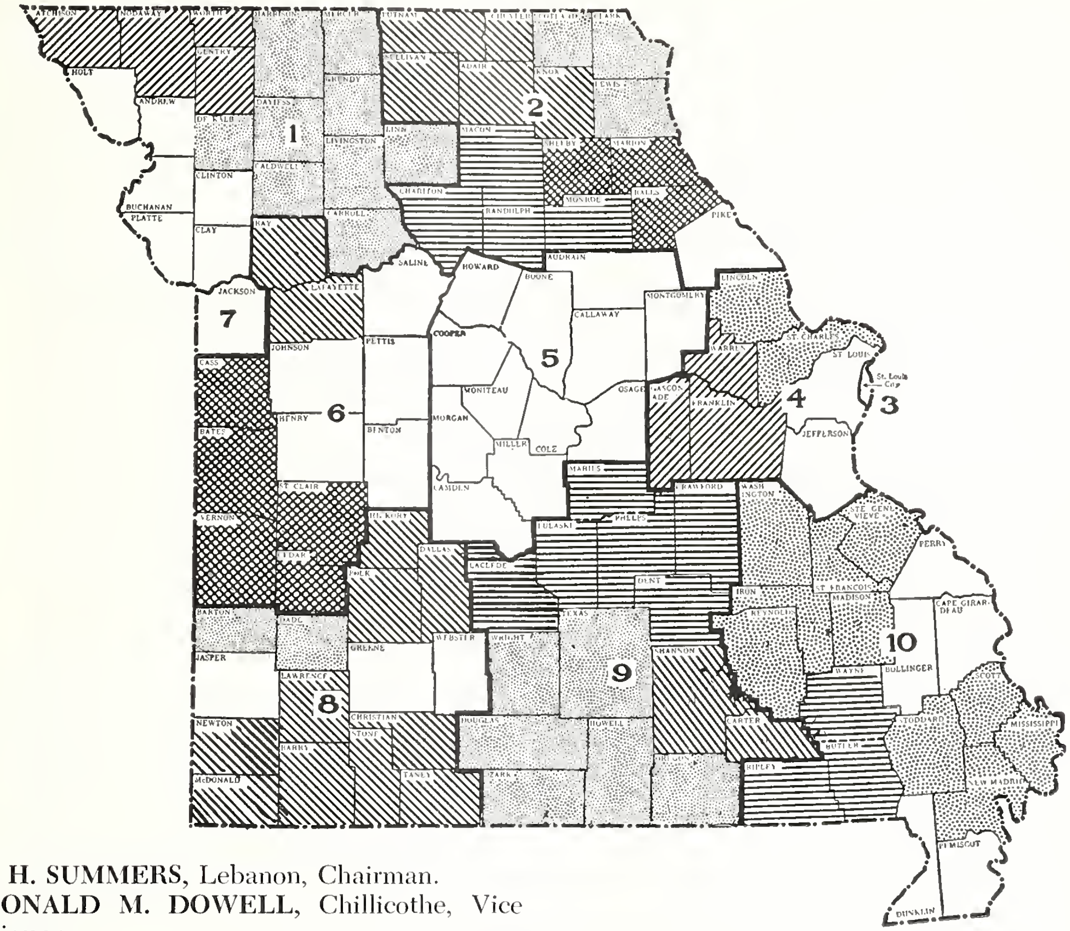
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Shaded areas show hyphenated component societies. Counties listed in italics are unorganized.

BOOK REVIEWS

(*Continued from page 114*)

BCG Vaccination Against Tuberculosis, by Sol Roy Rosenthal, M.D., Ph.D., Director, Institution for Tuberculosis Research of University of Illinois; Medical Director, Research Foundation; Director, Tuberculosis Prevention Research of the Chicago Municipal Tuberculosis Sanitarium; Associate Professor, Preventive Medicine, University of Illinois College of Medicine. With Sections by Dr. Camille Guerin, Honorary Chief of Service, Institut Pasteur, Paris; Dr. Bernard Weill-Halle, Honorary Director, School of Puericulture; Member Faculty of Medicine, University of Paris; and Dr. Arvid Wallgren, Professor of Pediatrics and Head of the Pediatric Clinic, Royal Caroline Institute of Medicine, Norrtull's Hospital, Stockholm, Little, Brown and Company, Boston, 1957. Price $7.50.

Two thirds of this book was written at the Pasteur Institute in Paris where Dr. Rosenthal had access to the world literature on BCG. Its author and subject index, and well documented references, make it helpful to those who are interested in tuberculosis.

The history of BCG written here by Dr. Camille Guerin is fascinating and brings a bit of human interest into this treatise.

Through the years, there has been much controversy on the use of BCG vaccine. The author states in his foreword, that this volume on BCG is directed toward the medical profession and allied groups in the United States, with the hope of clarifying the BCG problem. He also states that this vaccination against tuberculosis has been accepted with few exceptions, as standard practice in virtually every country in the world. It is estimated that over 100 million people have been vaccinated with BCG.

In the United States, the use of BCG has been on a small scale and mass vaccination is not advocated. The American Trudeau Society and the United States Public Health Service, along with other groups, recommend vaccination in "children and certain adults considered to have inferior resistance, and living in communities in which the tuberculosis mortality rate is unusually high."

This text discusses immunity in tuberculosis, vaccinations against tuberculosis other than BCG and follows with the history of BCG. The cultural characteristics, morphology and staining properties, the dissociation and variation of virulence or attenuation of BCG are outlined. "There have been three periods in the history of dissociation and variation in virulence of BCG since 1921, when the strain was considered stable and safe for human inoculation. During the first period (1921-1931), a virulent variant was described; in the second (1932-1935) reports on virulent variants were negligible; and in the third (since 1946), the possibility of a further attenuation has been suggested."

Methods of preparation and preservation of the vaccine are discussed and comparative studies of vaccines from various countries are given. The use of dried vaccine, its favorable comparison with fresh vaccine, and methods of vaccination are described along with reports on resistant studies in animals and man.

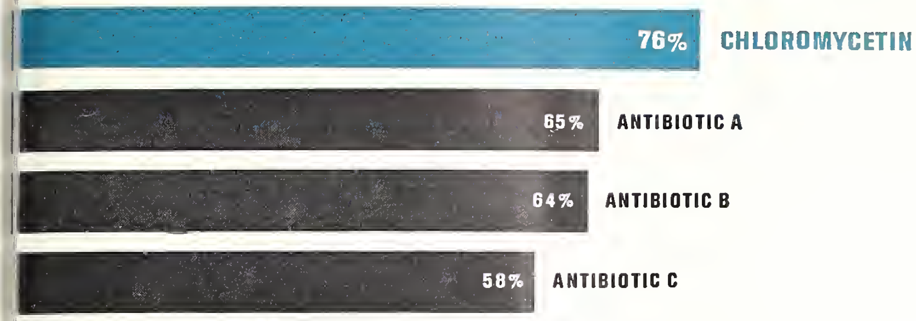
There are discussions on the results of tuberculin testing, and the use of varied forms of tuberculin after vaccinations and, too, there is a statement that for the present, BCG vaccination is not recommended without previous tuberculin testing, in order to minimize accelerated reactions and the possibility of vaccinating in the presence of active disease.

In the final chapter, "Tuberculosis Control and BCG Vaccination—Suggestions for a Comprehensive Control Program," there is a rough estimate that 30 to 40 per cent of the entire population in the United States, are infected with tubercle bacilli. About 45 per cent of active known cases of tuberculosis are unhospitalized. Of these, 87 per cent have far advanced disease. The status of sputum is unknown in one half; one half are discharged from hospitals against medical advice; and 40 per cent have no drugs or bed rest recommended. The rapid drop in death rate, due to modern chemotherapy and surgery, has not been paralleled so far as morbidity is concerned. One hundred thousand new cases of tuberculosis have been reported every year, for 14 years or more.

The concluding chapter includes a quotation from Dr. James J. Warring, written in March 1956: "I think negative reactors to the tuberculin test, among highly exposed persons, should have BCG vaccination. This would include nurses, medical students and children in tuberculous families. If this action is unapproved, one must surely seriously consider chemotherapy of recent converters with or without x-ray pulmonary signs."

"BCG Vaccination Against Tuberculosis" is truly an excellent reference, with a fine bibliography of past and recent writings on the subject. For this reader however, it did not clarify the BCG problem. F. E. M.

VITRO SENSITIVITY OF GRAM-POSITIVE COCCI FROM 5,600 CONSECUTIVE ULTURES TO CHLOROMYCETIN AND TO THREE OTHER BROAD-SPECTRUM ANTIBIOTICS*



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dapted from Leming & Flanigan.[1]

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Missouri Medicine

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Curiosa et Trivia

WILLIAM B. McCUNNIFF

TIMES DO CHANGE: Professor Charles D. Meigs, 1848, referring to vaginal examination: "He is but the pander of vice . . . an unchaste man who insists upon a vaginal . . . in all the cases of women's diseases . . . I am proud to say that in this country . . . there are women who prefer to suffer the extremity of danger and pain rather than waive those scruples of delicacy which prevent their maladies from being explored. I am rejoiced at it; because . . . it is an evidence of a high and worthy grade of moral feeling."

Semi-confirmed at zoological exhibits: greater density of animals plus the inability to run away (or move), is productive of tension, hypersexuality, and attendant items. Now, about this new housing development, Doctor. . . .

Almost 60 per cent of physicians report that they get their first knowledge of a new drug from detail men. A rip-roaring 8 per cent get the word from medical meetings.

Capsule Clinics

- Intravenous administration of EDTA brought about improvement in nine of 23 patients with scleroderma. Muller, S. A., et al., Arch. Dermat. **80**:187, 1959.

- For better or for worse, tranquilizers have become an important group of drugs. Sales of these agents in 1958 amounted to $175,000,000. Ehrlich, R. M., Canad. M. A. J. 81:241, 1959.

- Intrathecal administration of vitamin B_{12} and hydrocortisone failed to benefit a group of 26 patients suffering from amyotrophic lateral sclerosis. Pieper, S. J. L., and Fields, W. A., Neurol. 9:522, 1959.

- The onset of physiologic labor is not altered by administration of prochlorperazine nor does the drug interfere with the effects of endogenous or exogenous Pitocin. Vasicka, A., and Kretchmer, H. E. Obst. & Gynec. 14:500, 1959.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

FEDERAL EMPLOYEE INDEMNITY

March 1 has been named as the time that the indemnity-type insurance for the federal employee health benefits program will be contracted. Aetna Life Insurance Co., of Hartford, Conn., with that company reinsuring with other companies, has been named carrier for the insurance.

Four types of plans will be offered to about 1.8 million federal employees and approximately 2.2 million dependents of these employees. The other types of plans are government-wide service benefit programs underwritten by certain Blue Cross and Blue Shield, plans sponsored by employee groups and comprehensive medical care services offered by consumer-operated organizations.

SOCIAL SECURITY

Social security taxes rose again beginning with the first of this year and in a recent article in the *St. Louis Globe-Democrat*, it asks "Where will it stop?" There are now 13,500,000 persons who receive checks each month and it is estimated that the number increases about 1,000,000 each three years. In 1950 the program cost $800,000,000 and this year it cost $11,000,000,000. With no further Congressional action, the employee tax in ten years will be 4½ per cent, with the employer paying another 4½ per cent.

That some tax-payers are aware of this constant increase is shown by a letter in "The Mail Bag" also in the *St. Louis Globe-Democrat*. It reads in part, "Do most Americans realize what social security is planning to do to their pay checks in the next ten years? By 1969 each employee will be sending 4½ per cent of his hard earned cash to Uncle Sam, and his employer will be sending a like amount. Then, if Representative Forand has his way next spring, Congress will vote away another one-half per cent for 'compulsory hospitalization.' Add 'em up. That's 9½ per cent of your paycheck. . . . And what does the government do for health insurance for government employees? They have proposed to have the federal government (with my money) contribute two thirds of the plan and their employees one third."

HEALTH CARE OF AGING

The McNamara committee has issued a 677 page report on the proceedings of its public hearings held in July and August. The book covers responses to a questionnaire sent last summer to county and municipal officials, federal agencies, professional societies, social service organizations, voluntary associations and employee groups.

Excerpts from the report given in the Washington Report on the Medical Sciences indicate that the general consensus is that something must be done. From the Kentucky State Medical Association, however, came the response: "First of all, we need to reeducate the American people to their responsibility in caring for their dependents in these latter years along with a revival of thinking that steers away from the classification of our aged as undesirables. Perhaps this would be a priority the government could undertake."

DEMAND FOR HOSPITAL CARE

Included in 488 research grants and 829 fellowships recently granted by the National Institutes of Health, amounting to $9,723,695, was one to Johns Hopkins Hospital for $66,771 to study for two years patterns of demand for hospital care. Another grant of $25,000 went to Western Reserve University for a survey of patients' attitudes toward outpatient care.

HEALTH COSTS

It is estimated that Americans last year expended approximately $16.4 billion for health services. The government estimates that $4.3 billion went to physicians, $5.1 billion to hospitals, $4.3 billion for medicines and appliances, and $1.7 billion for dental care and miscellaneous care. However, it is also estimated that prices of food, personal care and transportation indices have advanced more than medical care in the last 20 years.

MEDICAL SCHOOL CONSTRUCTION

Based on a study made by a committee of physicians, educators and others, appointed by Dr. Leroy E. Burney, surgeon general, it is estimated that within 15 years there will be shortage of approximately 17,000 doctors.

To avert this condition, the committee recommended that there be a 10-year building program to provide additional classrooms for training more physicians. The study also recommended that there be greater public and private financial aid to medical students.

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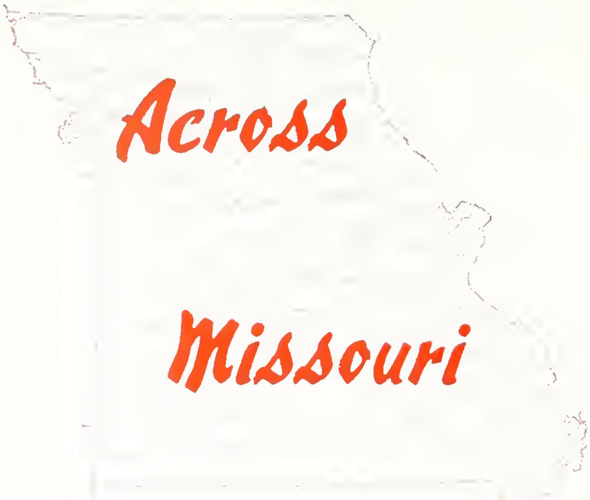
Cole	5	Marshall Kelly	Jefferson City	C. Stuart Exon	Jefferson City
Cooper	5	Vernon D. Friedrichs	Pilot Grove	T. C. Beckett	Boonville
Dallas-Hickory-Polk	8	Geo. G. Robinson	Humansville	Mary E. P. Griffin	Buffalo
Dunklin	10	Chas. S. Williams	Malden	E. L. Spence	Kennett
Franklin-Gasconade-Warren	4	Paul A. Brenner	Owensville	William Richardson	Union
Grand River Medical Society (Caldwell-Livingston-Carroll-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb)	1	Robert W. Smith	Marceline	B. D. Howell	Brookfield
Greene	8	W. W. Tillman, Jr.	Springfield	F. T. H'Doubler, Jr.	Springfield
Henry	6	Richard King	Clinton	R. S. Hollingsworth	Clinton
Howard	5	W. J. Shaw, Jr.	Fayette	Jos. W. Gardner	Glasgow
Jackson	7	Harold L. Gainey	Kansas City	Edward G. Kettner	Kansas City
Jasper	8	Irwin T. Craig	Joplin	David Allen	Joplin
Jefferson	4	Harry Yoskit	Festus	Frank L. Kozal	Crystal City
Johnson	6	Keith D. Jones	Warrensburg	T. Reed Maxson	Warrensburg
Lafayette-Ray	6	Walter E. Koppenbrink	Higginsville	Thomas B. Cook	Richmond
Lewis-Clark-Scotland	2	J. R. Bridges	Kahoka	Landon Y. Davis	Canton
Lincoln-St. Charles	4	Wm. H. Poggemeier	St. Charles	P. H. Rother	St. Charles
Marion-Ralls-Shelby	2	J. H. Walterscheid	Hannibal	Wyeth Hamlin	Hannibal
Mid-Missouri County Medical Society (Phelps-Crawford-Dent-Pulaski-Maries-Laclede)	9	A. R. Bauman	Steelville	M. K. Underwood	Rolla
Miller	5			Carl T. Buehler	Eldon
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve	10	Marvin T. Haw	Bonne Terre	George L. Watkins, Jr.	Farmington
Moniteau	5	K. S. Latham	California	L. M. Gallagher	California
Montgomery	5	E. J. T. Andersen	Montgomery City	Samuel J. Byland	Wellsville
Morgan	5	Robert R. Lyle	Versailles	Ruth Kauffman	Versailles
Nodaway-Holt-Atchison-Gentry-Worth	1	Isaac F. Sweaney	Oregon	Robert E. Dunshee	Maryville
North Ceneral Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)	2	Spencer L. Freeman	Kirksville	Paul E. Hilton	Kirksville
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald	8	H. C. Sweany	Mount Vernon	A. J. Graves	Mount Vernon
Pemiscot	10	P. J. Aquino	Caruthersville	John K. Duckworth	Hayti
Perry	10	Stanley Legner	Perryville	A. E. McDermott	Perryville
Pettis	6	Don C. Proctor	Sedalia	R. W. Lemire	Sedalia
Pike	2	Charles H. Lewellen	Louisiana	Roger F. Christensen	Louisiana
Platte	1	H. Graham Parker	Platte City	H. C. Thurman	Parkville
St. Louis City	3	Paul F. Max	St. Louis	Charles S. Sherwin	St. Louis
St. Louis	4	Jos. B. Kendis	St. Louis	Robert Hughes	Creve Coeur
Saline	6	E. Lee McCorkle	Marshall	R. W. Blalock	Marshall
Semo County Medical Society (Stoddard-New Madrid-Mississippi-Scott)	10	John Dernoncourt	Charleston	Thelma C. Buckthorpe	Sikeston
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)	9	J. L. Spears	Cabool	Rollin H. Smith	West Plains
Webster	8	C. R. Macdonnell	Marshfield	E. G. Beers	Seymour
West Central Missouri Medical Society (Bates-Cass-Cedar-St. Clair-Vernon	6	James J. Pascoe	Nevada	Carter Luter	Butler



Across Missouri

Nursing Homes Pose Problems

In answer to the many problems that have arisen recently in connection with nursing homes, DeKalb County, late last year, opened the first home under recent legislation allowing counties to build such facilities. In August 1958 citizens of DeKalb County voted 8 to 1 to tax themselves $187,000 to build the home. Concerning the home and the citizens of DeKalb County, Dr. H. M. Hardwicke, acting director of the Missouri Division of Health, said "The citizens can rightfully be proud for perhaps this is the first milestone in Missouri toward the problem of our ever increasing senior population. Care of the aged was never meant to be the responsibility of federal or state governments. The responsibility lies in every community, to each his own. The new DeKalb County retirement home will be a monument to the initiative and thoughtfulness of a group of people who believe in working together and doing for themselves."

While DeKalb County has taken care of its own care of the aged, in many other parts of the state small, unlicensed homes are operating and caring for an estimated 1,000 to 1,500 former nursing home patients. The Missouri law, passed after the 1957 Warrenton nursing home fire in which 72 elderly persons perished, does not provide for inspection of unlicensed homes.

A spokesman for the Missouri Association of Licensed Nursing Homes estimates that from $5,000 to $20,000 was spent on improving legitimate nursing homes and that their investment is being jeopardized by the "bootleg" homes.

St. Louis State Hospital Reports Progress

The ninetieth annual report of the St. Louis State Hospital for 1958-59, a book of 77 pages, gives in detail the work of the hospital. The report begins: "We are pleased to report advances in our professional work. This has been an extremely active year as much progress has been made in repairs and alterations to the building and replacement of outmoded equipment. . . . Psychiatric treatment has continued to improve and expand through the greater development of the milieu concept in our approach to therapy. Open door policies have been established in additional wards. . . . Drug therapies have become more effective so that this year there has been less need for use of hydrotherapy, electroconvulsive therapy and psychosurgery. . . . Activity in discharge planning increased and intensified. Use of hospital resources to stimulate the chronic population toward leaving the hospital, developing special community activities as part of convalescent leave programming, and new emphasis on after care were the major functions. In addition, we have begun to explore and plan for newly admitted patients to forestall chronicity in these patients."

A few figures illustrate the extensiveness of the work of the hospital. At the beginning of the year there were 3,294 patients in the hospital, with 109 on convalescent leave. During the year there were 380 admissions or readmissions and transfers from other hospitals. During the year there were 343 separations from the hospital, 228 direct discharges, 113 deaths and two transfers to other hospitals. At the end of the year there were 3,168 patients in the hospital and 277 on convalescent or other leave.

Of admissions during the last fiscal year, 68.75 per cent of patients were from the City of St. Louis, 23.71 per cent were from St. Louis County and 7.54 per cent were from other counties.

Missouri Is Publicized

The 1960 edition of the T. W. A. calendar features for the month of June a scene entitled "Missouri: Foothills of the Ozarks." The scene is of a winding Missouri gravel road, bordered by forest and a split-rail fence. Other months in the calendar feature such places as Paris at dusk and Lake Como.

Russians Do It Again

Missouri is supposed to have one of the highest rates of aged persons per population in the United States. Recently the Moscow radio said the Soviet government will make a special study of why people of Soviet Georgia live so long, this section claiming that 10,000 of a population of approximately 4,000,000, are 90 years or older, including two men 125 and 130 years old.

performance

genitourinary infection. Roberts, M. S.; Seneca, H., and Lattimer, J. K.,[1] New York, N. Y.–Ninety-one per cent of the Gram-positive and 27 per cent of the Gram-negative, among 66 organisms cultured from genitourinary infection, responded to DECLOMYCIN. Serum antibiotic activity was found three times greater than with tetracycline.

toleration. Boger, W. P., and Gavin, J. J.,[2] Norristown, Pennsylvania – Side effects with DECLOMYCIN were minimal. When dosage was 0.5 to 1 Gm. daily in divided doses, only two of 82 patients exhibited nausea.

activity level sustentation. Kunin, C. M.; Dornbush, A. C., and Finland, M.,[3] Boston, Massachusetts–Of the four tetracycline analogues, DECLOMYCIN Demethylchlortetracycline showed the longest sustained activity levels in the blood.

gonococcal infection. Marmell, M., and Prigot, A.,[4] New York, N. Y. – Of 63 cases of gonorrhea, 61 promptly responded after short courses of DECLOMYCIN. Therapeutic effect was found equal to that of intramuscular penicillin.

bronchopulmonary infection. Perry, D. M.; Hall, G. A., and Kirby, W. M. M.,[5] Seattle, Washington – Of 30 cases of acute bacterial pneumonia, all were afebrile following two to 10 days of treatment with DECLOMYCIN. Results were good in 21. . . . All of six patients with acute bronchitis responded promptly.

pediatric infection. Fujii, R.; Ichihashi, H.; Minamitani, M.; Konno, M., and Ishibashi, T.,[6] Tokyo, Japan – In 309 pediatric patients with various infections, DECLOMYCIN was effective in 75 per cent.

urogenital infection. Vineyard, J. P.; Hogan, J., and Sanford, J. P.,[7] Dallas, Texas – Clinical response in pyelonephritis correlated well with results of *in vitro* sensitivity tests, which showed some strains of *A. aerogenes*, Proteus and Pseudomonas more susceptible to DECLOMYCIN Demethylchlortetracycline than to its analogues.

pneumonia. Duke, C. J.; Katz, S., and Donohoe, R. F.,[8] Washington, D. C. – Results were satisfactory in all but two of 32 cases of acute bacterial pneumonia, of which only 11 were uncomplicated. No side effects were observed.

brucellosis. Chávez Max G.,[9] Mexico, D. F., Mexico – All of nine patients with *Br. melitensis* infection were afebrile after five days on DECLOMYCIN. Blood cultures were negative in all cases on the 20th day. Side effects were limited to slight temperature increases which abated in four days.

pustular dermatosis. Blau, S., and Kanof, N. B.,[10] New York, N. Y. – Results with DECLOMYCIN were excellent in both of two cases of impetigo, one of two cases of folliculitis, six of nine cases of furunculosis, all of three cases of acne rosacea and 26 of 45 cases of acne vulgaris. Overall, results were excellent or good in 85 per cent.

antibacterial spectrum. Finland, M.; Hirsch, H. A., and Kunin, C. M.,[11] Boston, Massachusetts – DECLOMYCIN Demethylchlortetracycline was found the most effective of the tetracycline analogues against two-thirds of 680 normally sensitive strains of 15 separate species.

the over-all picture. Combined results reported by 210 clinical investigators[12] – DECLOMYCIN produced a favorable response (cured or improved) in 87 per cent of 1,904 patients. Two-thirds of the patients received one capsule every six hours. Treatment was continued for as long as 180 days, but was between three and eight days in most. Side effects were seen in 9.9 per cent, but necessitated discontinuance of treatment in only 1.8 per cent.

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JOHN F. PEARL, M.D.

Missouri Academy of General Practice

The St. Louis Academy held its annual installation of officers on Saturday evening, December 5 at the Le Chateau in St. Louis County. Some 150 people including Academy members, their wives and guests were present to enjoy a full evening of well organized festivities.

Among the honored guests were Dr. Robert Bassett, President of St. Louis Medical Society; Dr. Robert Kingsland, President of St. Louis County Medical Society, and their gracious wives.

Seasons Greetings

St. Louis Academy officers for 1960 are installed.

The evening festivities began with a social hour spiced with the delicious Le Chateau hors d'oeuvres. Following a bountiful dinner, the proper introductions were made and the official program was under way. The retiring President, Dr. Charles Molden, briefly outlined some of the Academy activities during his time at the helm. The new officers for 1960 were introduced and are as pictured reading from left to right: Dr. V. E. Michael, President-Elect; Dr. W. A. Mullarky, Vice President; Dr. Eugene W. Hall, President; Dr. E. H. Edele, Secretary, and Dr. J. F. Trigg, Treasurer.

Seasons Greetings

Outgoing president, Dr. Molden (left) congratulates incoming president, Dr. Hall.

Following the introduction of the new officers the affairs of state were turned over to the new President, Dr. Eugene Hall. As the first official function in office, Dr. Hall awarded to Dr. Molden a plaque in recognition of his service as the 13th President of the St. Louis Academy of General Practice. Following the completion of the official business of the evening a period of dancing interspersed with the awarding of attendance prizes carried on the festivities.

1960 MAGP Committees

Advisory Committee—R. R. Becker, 4000 Baltimore, Kansas City, Chairman; all past presidents, members.

Public and Professional Relations—Elvin D. Imes, Maryville, Chairman; Robert Bassett, St. Louis; William Seabaugh, Cape Girardeau; E. W. Allen, Carrollton; G. A. Schulte, Joplin; Otto Theel, Kansas City; T. M. MacDonnell, Marshfield.

Representative to AAGP Mental Health Commission—Cecil Leitch, 808 S. 15th St., Blue Springs.

Education Committee—Doyle McCraw, Bolivar, Chairman; Wyeth Hamlin, Hannibal; Wilbur Mullarky, St. Louis; William Rost, St. Joseph; John Crowe, Cape Girardeau; Leroy Miller, Columbia; R. Glenn Elliott, Kansas City.

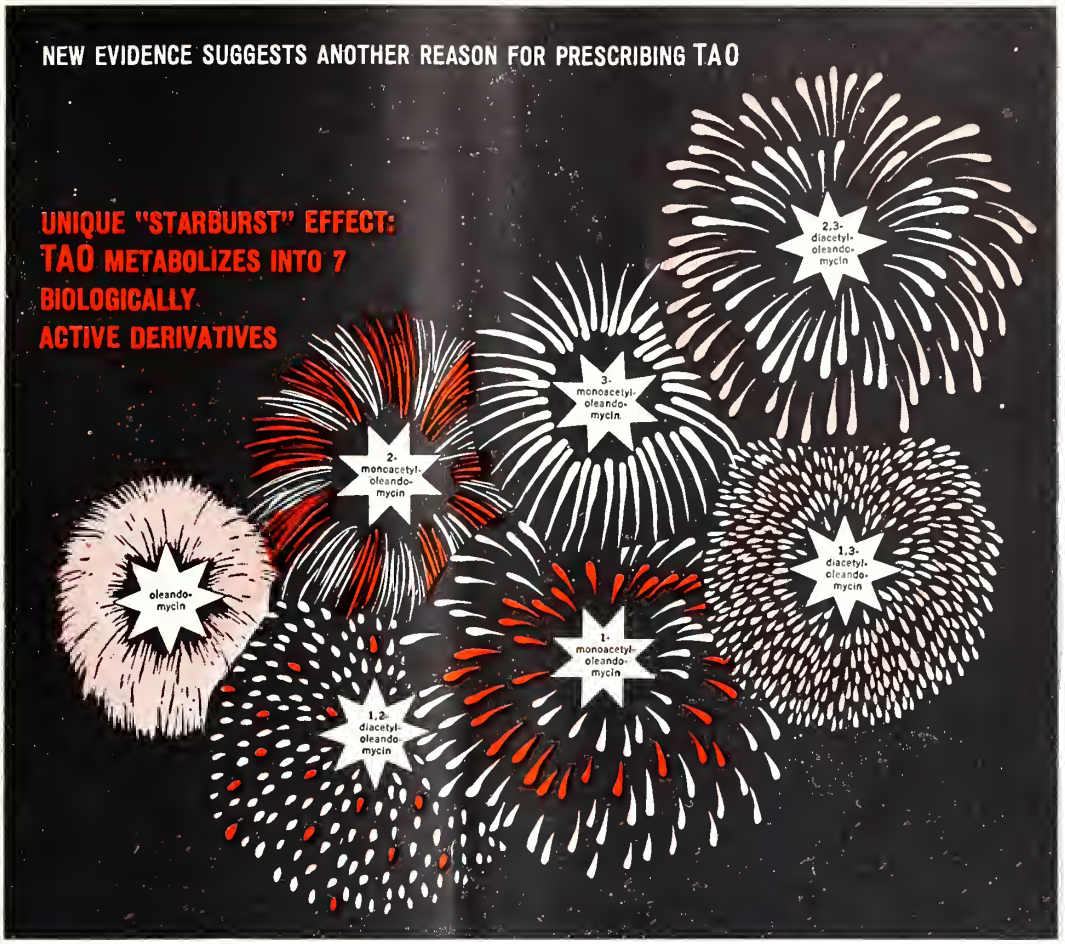
Hospital Committee—Walter Gunn, 4617 Dahlia, St. Louis, Chairman; William Richardson, Union; Scott Benson, St. Joseph; William McNew, Carthage; J. R. Cochran, Cape Girardeau; Charles A. Molden, St. Louis; Elmer Stegman, Raytown.

Publication Committee—Barney Finkel, 6510 W. Florissant, St. Louis, Chairman; Arthur Graves, Mount Vernon; J. F. Fairchild, Perryville; Walter Stelmach, Kansas City.

Finance Committee—John F. Pearl, St. Clair, Chairman; J. H. Trolinger, Jackson; M. A. Diehr, St. Louis.

Medico-Legal Committee—E. V. Henschel, 4401 Hampton, St. Louis, Chairman; T. L. Dwyer, Mexico; Luke Knese, St. Louis; Mr. Paul Koenig, Attorney, St. Louis; William Wagen-

(Continued on page 176)


NEW EVIDENCE SUGGESTS ANOTHER REASON FOR PRESCRIBING TAO
UNIQUE "STARBURST" EFFECT: TAO METABOLIZES INTO 7 BIOLOGICALLY ACTIVE DERIVATIVES
2,3-diacetyl-oleando-mycin
3-monoacetyl-oleando-mycin
2-monoacetyl-oleando-mycin
oleando-mycin
1,3-diacetyl-oleando-mycin
1-monoacetyl-oleando-mycin
1,2-diacetyl-oleando-mycin

The impression that TAO is an unusually active antibiotic has steadily gained recognition by impressive clinical performance. Now come reports of in vivo and in vitro biological and biochemical evaluations that show TAO to be indeed unique.[1,2]

TAO differs from other antibiotics in that it is metabolized to multiple active compounds which remain active throughout their presence in the body. These 7 derivatives (in addition to TAO) show activity against common Gram-positive pathogens, including resistant strains of Staph. aureus.

In light of these findings, take another look at TAO performance: • 92% success in published cases of Gram-positive respiratory, skin, soft tissue and genitourinary infection • Effective against 78% of 64 "antibiotic-resistant" epidemic staphylococci. (In the same study, chloramphenicol was active against 52%; erythromycin against only 25%)[3] • No side effects in 94%; infrequent reactions mild and easily reversed • Quickly absorbed • Highly palatable.

Sound reasons to: Start with TAO to end 9 out of 10 common Gram-positive infections.

Supplied: TAO Capsules—250 mg., and 125 mg., bottles of 60. **TAO for Oral Suspension**—125 mg. per tsp. (5 cc.) when reconstituted; unusually palatable cherry flavor; 60 cc. bottle. Prescription only.

Other TAO forms available: TAO Pediatric Drops: flavorful, easy to administer. **TAO®-AC:** TAO analgesic, antihistaminic compound. **TAOMID®:** TAO with triple sulfas. Intramuscular or Intravenous: in clinical emergencies. Prescription only.

1. English, A. R., and McBride, T. J.: Proc. Soc. Exper. Biol. & Med. **100**:880 (Apr.) 1959. 2. Celmer, W. D.: Antibiotics Annual 1958-1959, New York, Medical Encyclopedia, Inc., 1959, p. 277. 3. English, A. R., and Fink, F. C.: Antibiotics & Chemother. **8**:420 (Aug.) 1958.

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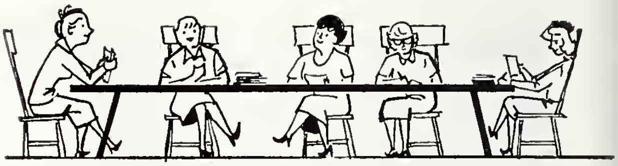
Woman's Auxiliary



"Name-dropping" is frowned upon socially, I know, but I want to do some deliberate "name-dropping" this month. I want to name just a few of the Auxiliary members who have given outstanding Community Service this past year. These women are but representatives of doctors' wives across the state, who have worked many hours in their churches, schools and civic organizations as well as in their auxiliaries.

Mrs. Stanley S. Peterson

Mrs. Frank Whitehead, president of Ozark Auxiliary, has recently been elected vice president of the Missouri Division of the American Cancer Society. She has worked as a volunteer in the society for 27 years.

Pettis County's diabetes detection survey was directed by Mrs. Robert Stewart of Sedalia. She was also one of the sponsors when the Future Nurses Club of Sedalia made a trip to Kansas City to tour Research and St. Mary's Hospitals.

Mrs. I. Berwald, St. Louis County, was honored with the presentation of a pin by the St. Louis County Civil Defense Unit in recognition of her efforts in furthering Civil Defense.

Mrs. V. E. Kenney, of Joplin, is serving on the Board of the Advisory Committee for Care of the Indigent. Mrs. L. S. Crispell, and Mrs. John Maddox, also of Joplin, edit and publish a news sheet for the Woman's Club.

In addition to her many other civic responsibilities, Mrs. Jordan Kelling, of Waverly, our president-elect, directs her church choir, devoting many hours to selecting, arranging and rehearsing the beautiful music they sing.

Among the many interests of Mrs. Richard Sutter, St. Louis County, a past state president, are the St. Louis County Health and Hospital Board, Health and Hospital Division Planning Board, Practical Nurse Education Council, Tuberculosis and Health Society, and American Cancer Society. She is being recommended for the *Globe-Democrat* Woman of the Year award.

The field of health education keeps another St. Louis County member busy. Mrs. Roland W. Stuebner's efforts include the chairmanship of Health Education section, Health and Hospital Division, Health and Welfare Council.

Mrs. Leon Fox, also of St. Louis County, is vice-chairman of the Missouri Committee for the 1960 White House Conference for Children and Youth. Another member of this committee is Mrs. E. W. Allen, II, of Carrollton.

In Columbia, Mrs. James C. Cope was chairman of the Residential Section of United Fund Drive for 1959. Mrs. James A. Baker serves as nursing chairman for Boone County Red Cross, and Mrs. Raymond Vichers, a registered midwife from England was the teacher for expectant parents classes organized by Mrs. E. P. Rodgers.

Among the many, many doctors' wives in Kansas City who are active in civic organizations are Mrs. William Bayne Allen, Girl Scout leader, and board member of Children's Cardiac Center; Mrs. Norman D. Asel, Mrs. Herbert Shuey, and Mrs. Gerald L. Miller, all P.T.A. presidents.

Leaders in hospital auxiliaries in Kansas City are Mrs. Harry M. Gilkey, Mrs. Charles Vilmer, Mrs. Eric Quer, Mrs. Harold Lyddon, Mrs. Robert Forsythe, and Mrs. J. H. Hill. Mrs. A. Graham Asher is on the Kansas City and Missouri boards of the Cancer Society.

In Maryville, our immediate past state president, Mrs. Henry C. Bauman, is now serving as P.T.A. president.

Mrs. Dallas Anthony, Jr., of Springfield, is a member of the Y.W.C.A. Board. Mrs. Durward G. Hall has just completed service as president of the Springfield Baptist Hospital Auxiliary.

I wish it were possible to relate the outstanding community service given by each Auxiliary member. The list of those I have omitted would be many times longer than the few I have mentioned. I have tried to show the diversified interests of our members.

As groups, the Auxiliaries have also served. Greene County helped the Tuberculosis Association by stuffing Christmas seal letters. In Jefferson City members made articles for the Memorial Hospital Bazaar.

Marian-Ralls-Shelby Auxiliary received an award from the American Cancer Society for their help in presenting educational films on cancer to women in their vicinity.

St. Louis City Auxiliary held its Annual Public

(Continued on page 158)

Volume 57, Number 2—February, 1960

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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WALTER HARVEY JACOBS, M.D.; HARRY STATLAND, M.D.;
DAVID S. DANN, M.D., *and* SIDNEY RUBIN, M.D., *Kansas City*

Acute Segmental Colitis

The acute phase of segmental colitis can present a bizarre picture and a case report pointing out possible confusion is presented.

Dr. Jacobs is an associate member of the Menorah Medical Center staff. Dr. Statland is chairman of the Department of Medicine of the Menorah Medical Center. Dr. Dann is chairman and Dr. Rubin an associate in the Department of Radiology of the Menorah Medical Center, Kansas City.

A case of acute segmental colitis is reported in a 59 year old male to emphasize the clinical as well as the radiological findings prevalent in this disease entity. Since the bizarre picture of the acute phase of this disease may be most confusing to the unwary, this case report is deemed worthy. The coexistence of this condition and quiescent hyperophthalmic Grave's disease is discussed in detail even though the dual relationship is considered a fortuitous one.

Case Presentation

Case 156960. D.S., a 59 year old white Jewish male, was admitted to the Menorah Medical Center June 29, 1959, because of 24 hours of watery diarrhea which had become grossly bloody. The patient had also reported progressively more severe left upper quadrant and left flank pain, steady and dull in character, and lower abdominal cramping pains that would subside after each passage of stool and flatus. There were no chills or fever and, when questioned, the patient reported that he had experienced no tenesmus. Prior to this, the patient had no complaints referable to the gastrointestinal system and habitually passed one formed stool each morning. Meals had been prepared at home during the previous week and were shared with the patient's wife who had no gastrointestinal complaints. The patient gave no history of recent respiratory infection.

Of interest in the past medical history was the insidious development of a severe bilateral exophthalmos beginning in 1950. At that time, there was no clinical or laboratory evidence to suggest hyperthyroidism and skull x-rays had revealed no abnormality. The patient had been examined by Dr. J. H. Means, in Boston, in July 1950 who concurred with the diagnosis of hyperophthalmopathic Grave's disease and recommended therapy with thyroid extract (grains 1½ daily) supplemented by iodine therapy. After receiving this dose of thyroid, plus 5 drops of Lugol's solution three times daily, the patient felt well. Frequent exophthalmometric measurements revealed a small decrease in the degree of exophthalmos over the intervening years. The highest recorded basal metabolic rate was plus 16 per cent in 1950. The most recent basal metabolic rate was plus 2 per cent.

In 1952, the patient exhibited a transient glycosuria. At this time, his fasting blood sugar was 135 mg. per cent and he showed a diabetic curve in an oral glucose tolerance test.

The only surgical procedure was an uncomplicated repair of a left-sided inguinal hernia in 1951.

Physical examination on admission revealed a well nourished and well hydrated patient. He appeared somewhat apprehensive and was in moderate distress, complaining of abdominal pain. Temperature was 99 F. orally, blood pressure 160/100 mm. Hg. and pulse 100. The bilateral exophthalmos was readily apparent and appeared unchanged from its previous status. Skin was cool and damp and there were no apparent lesions. The thyroid gland was barely palpable and no nodularity was detectable. The abdomen was flat. There was moderate tenderness and guarding in the left upper quadrant. No rebound tenderness was present and there was no tenderness throughout the remainder of the abdomen. Bowel sounds were hyperactive.

Initial urinalysis revealed 2+ albuminuria and 2+ glycosuria. Hemoglobin was 18.2 grams and the white blood cell count was 19,850. The differential white cell count included 84 mature neutrophils, 2 stabs and 14 lymphocytes. An emergency roentgenogram of the abdomen was obtained (figure 1).

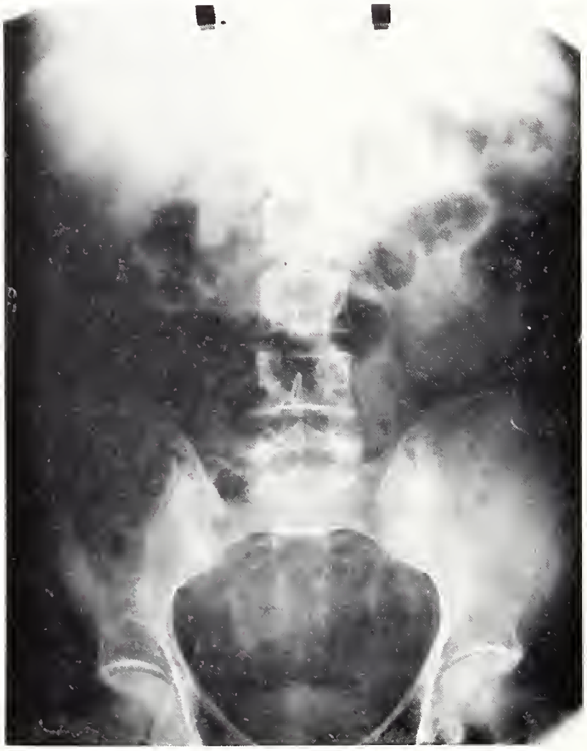

Fig. 1

This revealed a gas-filled colonic segment in the upper half of the abdomen. There were alterations of the normal bowel pattern with irregular segments of colon and a suggestive thickening of the bowel wall. The ragged air pattern in the transverse colon suggested edema of the colonic wall and mucosa.

The patient was treated with deodorized tincture of opium, 8 drops every 4 hours; Pathilon, 25 mg. every 6 hours; Neomycin, ½ gm. very 6 hours and a bland low residue diet.

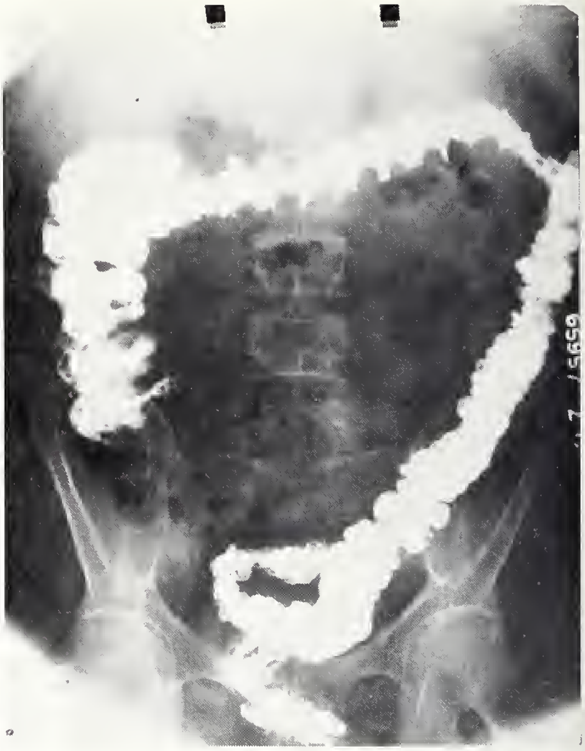

Fig. 2

Within 24 hours, the passage of liquid bloody stools ceased, as well as the lower abdominal cramping pains. The pain and tenderness in the left upper quadrant had abated markedly. Barium enema examination performed the morning of June 30 revealed the serrated transverse colon proximal to a narrowed area of about 7 cm. in length in the region of the splenic flexure (figures 2 and 3). The mucosa of this area appeared to be markedly edematous. This was reflected in an irregular indented pattern confined to the transverse colon. The indentures were large and had the appearance of jagged serrations with deep troughs. If the colon was distended with barium, the peaks lessened and the trough appeared to widen, thus emphasizing the limited pliability of the mucosa. In the splenic area the wall was markedly thickened as represented by the distance between the barium filled colon and adjacent

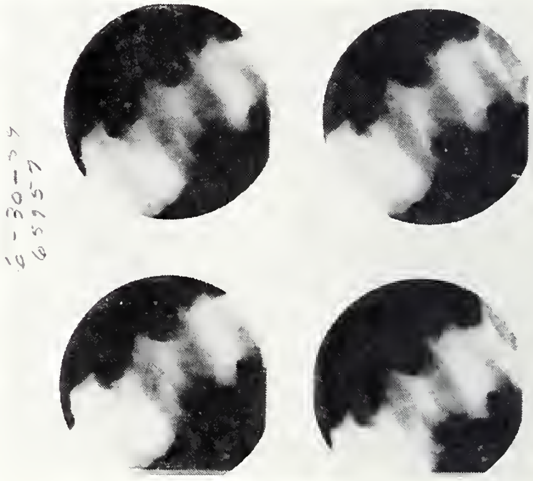

Fig. 3

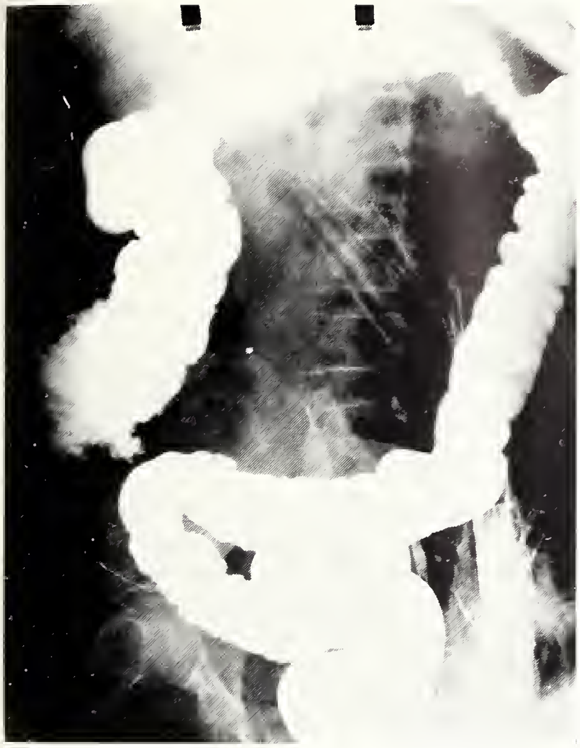

Fig. 4

gas-filled loops. There was a gradual tapering of the proximal and distal end of the narrowed colonic segment and a scalloped border on the superior aspect of the colon was remotely suggestive of a neoplasm. This consideration was mitigated by the fluoroscopic observations of some alterability of the lesion (figures 4 and 5). Several diverticula were observed in the sigmoid colon and the entire colon, except for the narrowed segment mentioned above, revealed normal distensibility and an intact-appearing mucosa.

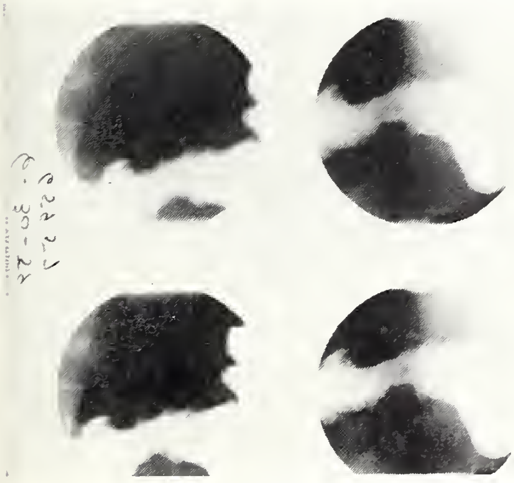

Fig. 5

The patient's clinical improvement continued. Neomycin was discontinued and replaced with Sulfathadiline, 1 gm. every 6 hours. Cultures of the stool revealed no Salmonella or Shigella stains and there were no ova or parasites in fresh or concentrated stool specimens. Two hour postprandial blood sugar was 144 mg. per cent. The basal metabolic rate was 10 per cent.

Five days after the initiation of therapy, there was no discernible abdominal tenderness and the patient was symptom free, passing formed stool one to two times daily. Glycosuria had ceased soon after admission. Sigmoidoscopic examination performed on July 13 revealed normal appearing rectal and colonic mucosa.

He was allowed to return home on July 14. After abrupt discontinuation of deodorized tincture of opium, the patient experienced cramping pain and diarrhea for three hours. This was not accompanied by rectal bleeding. Tincture of opium, 8 drops every four hours, was reinstituted and then was gradually withdrawn.

Barium enema examination was repeated on July 20. At that time, the previously described narrowed area (figure 6) appeared normally distensible, and only on a post evacuation film (figure 7) was the slightest suggestion of mucosal edema discernible.

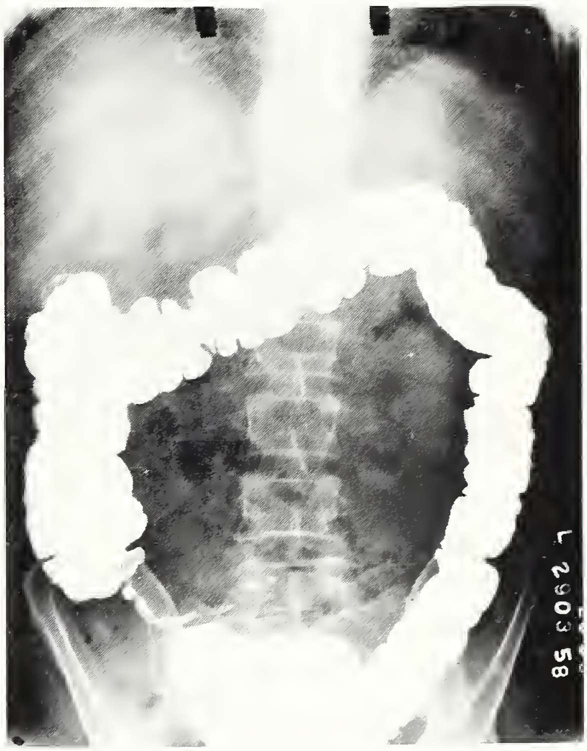

Fig. 6

For the past month the patient has been symptom free. He continues to pass formed stool one to two times per day. Because of the glycosuria, elevated

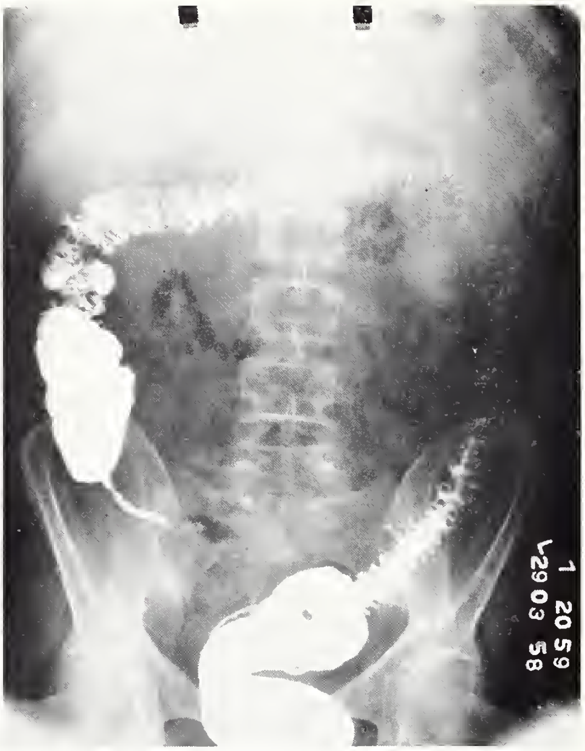

Fig. 7

two hour postprandial blood sugar and diabetic glucose tolerance curve in the past, the present recommended diet is a 2,400 calorie bland low residue diabetic diet. Presently, he continues to take sulfathalidine, 1 gm. four times daily, in addition to his regular use of desiccated thyroid (grains 1½ daily) and Lugol's solution (5 drops three times daily).

Discussion

Segmental or regional colitis was first described by Bargen and Weber in 1930.[1] It is an inflammatory disease of unknown etiology that initially involves one or more segments of the colon but spares the rectum and rectosigmoid. Bargen[2] states that it represents from 4 to 10 per cent of the patients with chronic ulcerative colitis seen at the Mayo Clinic. Crohn, Garlock and Yarnis[3] report that 8 per cent of all cases of ulcerative colitis are regional or right sided.

This disease usually begins in the earlier years of life; however, the ages of the 77 patients reported by Crohn, et al.,[3] ranged from 6 to 60 and Bargen has observed the disease in all decades up to seventh. There does not appear to be a clear-cut predilection. Jews are frequent victims of this disease which rarely attacks Negroes.

As with universal colitis, the underlying etiology of the disorder is unknown. Furthermore, precipitating causes are not readily apparent in the majority of cases although upper respiratory infections and surgical procedures, particularly anorectal surgery, are at times noted to immediately precede an initial attack or an exacerbation.

When contrasted with universal or left-sided colitis, the disorder is usually less severe in that diarrhea, tenesmus and bloody stools are less pronounced;[3] however, diarrhea is the most frequent symptom.[1] Two thirds of the 201 patients reported by Bargen, et al.,[2] complained of cramping abdominal pain, approximately one half noted gross blood in the stool, and intermittent fever was reported by one third. At times the disease behaves quite atypically and may present with the picture of acute intestinal obstruction as did eight of the 26 cases reported by Kellock.[4] Segmental colitis may be the cause of a "fever of unknown origin" unassociated with signs or symptoms referable to the gastrointestinal tract.[5] It may be manifested by alternating constipation and diarrhea or by constipation alone. Constitutional manifestions, fever, joint, ocular, dermatologic and cardiac signs or symptoms, are more apparent than in universal or left-sided colitis.[3]

The diagnosis of segmental colitis is dependent on the roentgenologic findings. The indenture sign is the earliest roentgen sign[9] of the acute phase of colonic infection. This sign although nonspecific was first defined by Rendich and Ehrenpreis in 1933.[11] The authors present this indenture pattern in a postoperative specimen filled with barium. They established the significance of the spike-like alterations as being due predominantly to swollen edematous folds rather than mucosal ulcerations.

The roentgen demonstration of this colon pattern does not imply a specific etiologic agent as the causative factor. The peaks and serrations which are observed under fluoroscopic observation may be secondary to many disease entities such as early ulcerative colitis, diverticulitis or any acute inflammatory process.

In the case presented, narrowing of the lumen just proximal to the splenic flexure required the inclusion of carcinoma in the differential diagnosis (figure 4). This consideration was excluded by a repeat examination when the dramatic alteration of the mucosal pattern was sufficient to limit the consideration to the acute exudative group.

Bargen[2] states that the appearance of a granulomatous process is more common than that of ulcerative disease. In the former type, the wall appears thickened and stiffened—as in the present case. In the ulcerative type, the colonic wall is more pliable, merges more gradually with normal intestine, and studies usually readily reveal the serrations characteristic of ulcerations. Transverse colon involvement is quite common—the right half of the transverse colon was involved in 156 instances and the left half in 147 of the 201 patients reported by Bargen.[2] In the same series, the sigmoid alone was involved in 69 patients, the lower descending colon in 117, the cecum in 144 and the ileum in 45.

Remissions in the course of this disease and even disappearance of objective manifestations of regional colitis have been reported following conservative therapy. Of 75 patients followed by Crohn, et al.,[3] 19 continue under medical therapy. Of these, 12 remained well, three improved and four were unimproved. In a subsequent publication, Yarnis, Marshak and Crohn,[13] in speaking of ileocolitis, commented that the adrenocortical steroids and adrenocorticotrophin appear to be of definite value. They are particularly useful in the acute stages with fever and toxemia. Neumann, et al.,[7] report that two thirds of patients experiencing a recurrence after medical therapy did so in the first two years.

A significant number of cases will require surgical intervention. This may be indicated for complications of the disease such as fistulae, bleeding, obstruction, severe inflammatory rectal complications or for intractability under medical management. Treatment, of course, must be individualized in each case but as Bargen points out, disease of the ulcerative type shows greater tendency to extend orad and caudad indicating more conservative management. However, with disease of the granulomatous type which has remained localized for a considerable period, surgical resection is probably the treatment of choice. Marshak and Eliasoph,[6] in speaking of results of operative procedures, point out that results are better after surgical treatment for granulomatous ileocolitis as contrasted with ulcerative segmental colitis and recurrences after surgery are less frequent.

The relation between the hyperophthalmic Grave's disease and segmental colitis most probably is fortuitous. Williams[12] comments that diarrhea is noted in approximately 25 per cent of cases of true thyrotoxicosis. He also notes that another 33 per cent are free from diarrhea but do report an increased number of daily stool passages. Paulson, in Portis' textbook,[8] states that thyrotoxicosis and ulcerative colitis may be present concurrently or may be independent of each other. It is his feeling that the thyrotoxicosis may be a contributing factor to the ulcerative colitis. Rawson and Rall[10] comment that chronic ulcerative colitis may simulate Grave's disease, but the two disorders can and should be differentiated.

SUMMARY

1. The roentgen and clinical picture of segmental colitis are presented to alert the clinician and the radiologist to the bizarre picture that may prevail.

2. The indenture sign is described as the earliest roentgen finding in acute segmental colitis.

3. The fortuitous relationship of segmental colitis and exophthalmic Grave's disease is suggested in a 59 year old male.

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Prolonged Labor

Prolonged labor continues to be of importance to all physicians dealing with this problem. Public health statistics for the State of Missouri reveal that labor prolongation may be responsible for a definite segment of maternal and fetal wastage. A prophylactic approach to this problem is recommended generally. Sequelae to prolonged labor in terms of maternal and fetal damage may be circumvented by early recognition of cephalopelvic disproportion, proper evaluation and therapy of uterine inertia and the judicious selection of early therapeutic methods that will result in expeditious delivery, either vaginally or abdominally.

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Although prolonged labor is an oft discussed and well recognized obstetric problem, it nevertheless would appear that repeated consideration of this phenomenon is pertinent in the interest of further reduction of maternal and perinatal mortality and morbidity.

Prolonged labor, at best, is a mental and physical trial for even the best and healthiest patient, a distressing complication to the husband and family, and a source of well merited anxiety to the attending physician.

Even more pressing reasons for reassessment of this subject exist in the maternal and perinatal mortality figures presently accepted as occurring, perhaps, in association with prolongation of labor.

In 1957, the last year for which there are completed public health statistics for Missouri,[2] there were 97,161 residential live births. Associated with these there were thirty-two maternal deaths from all causes, a rate of .33 maternal deaths for each 1,000 live births. During the same interval, 1,606 stillbirths were recorded, a rate of 18.9 per 1,000 live births.

In addition, public health statistics show that there were 2,406 infant deaths prior to the age of 12 months. It is of interest to note that 244 of these deaths (2.5 per 1,000 total live births) occurred as a direct result of injuries incurred in the process of delivery.

Information available does not permit accurate enumeration of those stillbirths and neonatal deaths directly attributable to prolongation of labor with its attendant complications. It is, however, informative to consider a breakdown of the major causes of infant deaths occurring under the age of 4 weeks. Table 1 presents this information for the years 1953 through 1957.[2] If one may assume that birth injuries and infections of the neonate may be associated with prolonged or neglected labor, then it would appear that perhaps 30 per cent of infant losses are at least in part secondary to this obstetric entity.

TABLE 1

MAJOR CAUSES OF NEONATAL DEATHS UNDER 4 WEEKS IN MISSOURI

	1953	*1954*	*1955*	*1956*	*1957*
Birth injuries	629	626	639	606	618
Pneumonia of newborn infant	97	98	73	81	89
Diarrhea of newborn infant	24	26	10	13	14
Other infections	23	28	14	20	30
Total infant deaths under 1 year	2,537	2,507	2,376	2,352	2,406
Prolonged labor per cent potential	30.4	31.0	30.9	30.6	31.2

The physiologic mechanisms involved in causing the onset of labor are still obscure. At some time, usually after an interval of approximately 276 days, the uterus spontaneously begins this process which terminates in a variable length of time in expulsion of the products of conception. It is not known whether this phenomenon comes about through uterine distention, a shift in hormone levels with a drop in Progesterone, increased sensitivity to posterior pituitary fractions, a finely timed change in membrane potential between cells in the myometrium or some other as yet unsuggested play of events. It is, however, a fact that the extent of inability in discerning the causative factors resulting in the onset of labor is paralleled only by ineptitude at concluding the diagnosis itself in its early stages.

As a matter of fact, it is well recognized that the diagnosis of labor is one of the most elusive in obstetrics. Unless this is established, one has difficulty in both assessing the true duration of labor and in gauging the proper interval for obstetric intervention.

Indeed, many a patient has received vigorous and often radical therapy, both vaginally and abdominally, for pathology of labor when, in truth, she was not in labor at all. On the other hand, many mothers are permitted to continue in a prolonged labor which may be futile from the standpoint of spontaneous vaginal delivery and injurious to both mother and child.

The point of judicious intervention is a fine one, and it is in the selection of this interval and in the applicatnon of accepted obstetric principles, that betterment in maternal and fetal statistics related to loss and morbidity due to labor prolongation may be expected. This concept has been summarized nicely by Dr. H. Vincent Corbett.[1] "Much confusion has arisen as to where 'meddlesome midwifery' ends and 'timely intervention' begins. Mother and child have been known to fall unhappily between these two stools."

The diagnosis of labor must be based on a series of abdominal and pelvic phenomena including cyclic uterine contractions resulting in progressive dilatation and effacement of the cervix and descent of the presenting fetal part. Once truly in action under normal conditions the term, gravid pelvic genitalia are not easily dissuaded from their task, even by sedation.

Once labor is established, in the absence of fetal, uterine and maternal pelvic pathology, a fairly predictable course of events may be anticipated.

Much work has been accomplished in comparing time in labor to cervical dilatation.[3, 4, 5] Abnormalities resulting in prolongation of total time in labor may be expressed graphically, extension of various segments of the curves analysed and the effects of stimulation evaluated in terms of normal. Cervical dilatation-time curves may be segmented into several characteristic phases. Over-all prolongation of latent, acceleration and deceleration segments may be seen in uterine inertia while extension of the deceleration phase is characteristic of borderline cephalopelvic disproportion or malposition.

In a generally acceptable fashion, the average duration of labor has been estimated to be twelve hours in the primiparous patient and eight in the multiparous. Variations in these durations are common. It is in the interpretation of these longer labors that obstetric art and judgment play an integral part in maternal and fetal welfare.

Variable time limits have been set at delineating true prolongation of labor. Minimums varying from 30 to 48 hours have been suggested as representing the interval presumed to be pathologic. It is generally recognized, however, that arbitrary time limits alone serve neither to accurately define nor adequately afford proper therapy in instances of true extension of labor. For this reason, many, in an attempt to circumvent the ills attendant to this clinical problem, arbitrarily select an earlier time interval at which to reevaluate the patient from the standpoint of prophylaxis, rather than waiting and allowing prolongation of labor to establish its characteristic maternal and fetal detrimental effects and render therapeutic maneuvers less effective.

Aside from the consideration of time alone in labor, it is perhaps of even more importance to evaluate the relative effectiveness of a given labor in terms of results accomplished. Certainly, a labor which is slow but at the same time efficient in terms of progressive cervical dilatation and descent of the presenting fetal part rarely warrants active intervention or disproportionate obstetric alarm. This premise has been well advanced by Dr. James Y. Simpson, who wrote in 1871, "Wait to see what nature can effect, not what she can endure."[6]

On the other hand, because progress must be evaluated and potential missed pathology excluded at some time, it serves our purpose best to set an arbitrary time at which the patient is reevaluated in an attempt to best formulate her immediate obstetric future.

If, after 18 hours, a patient has not delivered, she should be evaluated abdominally, a sterile vaginal examination performed, and x-ray pelvimetry obtained. By these efforts, it may be hoped that a diagnosis can be established and an appropriate course of action selected and carried out.

Table 2 depicts some of the more important causes of prolongation of labor. Once labor is unmistakably in effect, most causes contributing to prolongation fall into the major categories of either cephalopelvic disproportion or uterine inertia.

TABLE 2

CAUSES OF PROLONGED LABOR

1. Patient not in labor.
2. Patient in labor
    a) Cephalopelvic disproportion
        Large or malformed fetus
        Contracted pelvis
        Abnormal fetal presentation
        Cervix
    b) Uterine inertia
        Functional
        Iatrogenic

Inertia, a still poorly defined problem, both clinically and etiologically, is somewhat of an obstetric enigma. Suffice it to say that inertia must, for practical purposes, remain an exclusion diagnosis, dependent on its establishment the investigation and exclusion of any condition lending itself to cephalopelvic disproportion. Variations in the size of the maternal pelvis or fetus, abnormal presentation or conditions affecting cervical integrity or function must be recognized and evaluated in respect to potential vaginal delivery. Recognition of absolute disproportion on any of these bases dictates the obvious solution to the problem, abdominal delivery.

On the other hand, absolute exclusion of disproportion lends immeasurable strength to the diagnosis of uterine inertia or dyscoordinate function. Weak and easily indentable uterine contractions associated with prolongation of all phases of cervical dilatation are, of course, usually associated with this syndrome.

In this condition, with reasonable assurance of vaginal delivery, stimulatory measures such as amniotomy and/or intravenous Pitocin under careful supervision are in order. Although regimens involving "resting" the patient are utilized widely as treatment for uterine inertia, it is felt that in many instances in which the cervix is already partially dilated and the presenting part well engaged in the pelvis, temporization at this time may needlessly delay delivery. Heavy sedation to insure "rest" may depress the fetus needlessly. Also, when prolongation of labor has already lent itself to the establishment of progressive intra-uterine sepsis and when, in truth, one cannot be assured that the patient will actually go into good labor when her drugs wear off, it would seem plausible that following the diagnosis of uterine inertia, in this instance, measures might best be taken to insure prompt delivery by means of either amniotomy, intravenous Pitocin, or both.

Unfortunately, a definite segment of all labor prolongations fail to fit nicely into either of the aforementioned categories. On inspection, the pelvis is not definitely contracted, no absolute disproportion exists from the standpoint of fetal presentation or size, labor has been poor and it is felt that an adequate test of the pelvis has not been accomplished. It is in this instance that it is felt reasonable to carry out a "trial of labor." After a carefully supervised and regulated period following amniotomy and/or Pitocin stimulation, the capacity of the maternal pelvis is tested under conditions of good clinical labor and the effects of that labor evaluated in terms of actual accomplishment. Limitation of trial delineates itself in terms of labor accomplishment and progress alone. Several hours of trial will often answer and make clear the problem of fetal pelvic compatibility and uterine inertia.

The problem of sepsis in association with prolonged labor cannot be ignored, both from a maternal and fetal standpoint. It is felt that here, as indeed in the entire consideration of labor prolongation, prophylaxis rather than therapeutics constitutes the desirable approach to the problem. Antibiotics should be administered to all patients who are in labor, have had ruptured membranes for over 12 hours, and in whom delivery is not imminent. All patients still in labor 18 hours should be prophylactically reevaluated and delivered by the most expedient and appropriate route. Certainly, cesarean section constitutes the best prophylaxis when it circumvents long arduous labors, decreases intra-uterine sepsis, avoids difficult vaginal instrumentative procedures and supports perinatal and maternal welfare.

Although becoming progressively less frequent, it is still necessary, on occasion, to deal with labors prolonged due to cephalopelvic disproportion and associated with frank intra-uterine purulency as a result of long rupture of the fetal membranes. Here, a prophylactic approach would dictate extraperitoneal surgical technics in association with antibiotics.

Maternal and perinatal mortality have been reduced significantly over the last twenty years. Although important etiologic factors such as infection and hemorrhage are being controlled to a greater extent, the remaining segment of pregnancy wastage cannot be ignored. This group must remain exposed to constant surveillance and criticism and an organized effort brought to bear on its eradication.

This will be accomplished by both more thorough prophylactic application of accepted obstetric principles and the striving for improved methods of dealing with pathology associated with pregnancy, labor and delivery.

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The Physician, Tranquilizers And Control of Nervousness

A warning of the difficulties encountered in handling phobic anxiety is given in that tranquilizers can defeat the purposes for which they are prescribed. The guidance of such persons is outlined.

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CONCEIVING HIMSELF as an alleviator of suffering, the physician is naturally delighted to avail himself of the tranquilizers, proven relievers of the discomfort of tension. However, history demands alertness to undesirable consequences: to relieve pain may obscure the cause, narcotics may addict, antibiotics upset the balance of intestinal flora, hormones inhibit natural gland function. The theme of this paper is that, applied to a specific form of anxiety, tranquilizers can defeat the purposes for which they are prescribed.

In general, supportive handling of anxiety can quite satisfactorily be effected by the physician who is not a psychiatrist. When the anxiety syndrome exhibits phobic features, satisfactory handling by the physician requires special knowledge or a particularly "suited" personality and approach. Without these it may be wiser for him to decline treatment of the patient with phobic anxiety.

ILLUSTRATIVE CASE REPORT

The following case is of a 29 year old man referred to a psychiatrist because treatment was not going well. He had consulted an internist because he felt he had to keep moving all the time, had episodes of feeling tense and "scared" half a day at a time, first about eight months previously while on a plane flight. He feared to go to sleep as he felt "violent," as though his head would blow off. He felt he had to be around a doctor all the time. Tranquilizers were prescribed and changes were made as each in turn failed to abolish the anxiety. At times he felt well, but a depreciating remark about someone seeing a psychiatrist plunged him into a state of tension two days before the initial interview.

The emphasis in interviews was on his life history, his needs to excel, to be acceptable, and how he may have become so sensitive about others' opinions of him. He was told he could dispense with pills and was seen at two week interviews for about six weeks, and then he suspended, ostensibly on account of the expense. He was given ritalin and he did well till a druggist asked if it did not make him nervous. This brought him back to the psychiatrist after a month suspension. He sought positive guarantees he would be "all right." Despite his apprehensions, he was pleased to survive the therapist's vacation on his own resources. He became comfortable for an increasing proportion of the time. He discovered he became upset occasionally when an aggressive posture was appropriate, or when the possibility of losing control was depicted to him, as on TV programs. Using the words "If it only hadn't happened . . . " he expressed his feeling that having the first episode of symptoms was a disaster that would lastingly hurt his life. He had felt hostile to the therapist because he had been obliged to seek his help.

This man's internist knew that his patient had anxiety symptoms, that no danger existed, and he dealt with the patient conscientiously, authoritatively, reassuringly. Why did the patient not respond to his ministrations? The answer is that his actions as a physician and his attitude were

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Prolonged Labor—Continued

CONCLUSIONS

1. Prolonged labor continues to account for a segment of maternal and perinatal morbidity and mortality.

2. A prophylactic approach to potential labor prolongation is discussed.

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not consistent with his words. A phobic individual is extremely sensitive to every sign that reinforces or abates his fear. Thus he responds to the words "It's only nerves," but not for long. He is soon back for another dose of reassurance. And he accepts "There's nothing wrong," but his reservations to this denial of his symptoms grow just as soon as he fills a prescription for an expensive tranquilizer. When he again reports to the doctor and receives a different tranquilizer, his fears will not be quieted. When he phones to report on how badly he feels and the physician accommodatingly suggests he come to the office, then he feels things are bad indeed. To understand what constitutes a consistent reassuring attitude by the physician it is essential to know what phobic anxiety is.

The phobic individual is engaged in a battle for control against inner forces perceived as destructive and to bluff against external situations to which he feels inadequate. He prosecutes this battle against tension characteristically by a pattern of avoidance. Thus, if he had his first anxiety attack in a drugstore, he would just as soon not go into drugstores or at least not alone. The tension is temporarily eased by "keeping out of danger" but its relief soon requires that he avoid stores in general and, then, gatherings of people. The ultimate result of the pattern of avoidance is severe restriction of activity, both because so few "safe" places are left and because he avoids committing himself to as yet untainted activities lest he not feel "all right" when the time comes. He dreads experiencing the anxiety anew, for that adds other cautions he must observe and accentuates his feeling of skidding downhill to a complete loss of control. The "dangers" the phobic individual avoids are shadowy anticipated crises—fainting, doing something ridiculous, simply revealing the weakness about which he feels so ashamed. With concrete, present dangers he copes correctly. So if a child receives a laceration the phobic individual will apply first aid, call the doctor and take the child for treatment; but this same individual will put off making an appointment for the orthodontist lest she not be up to the task of driving that day (because of the apprehensions she expects will plague her).

Understanding these points, the physician can be of immeasurable help to the phobic individual. Most phobic persons understand themselves quite well—even to the point of what they should do about it. But they do not quite dare follow what they know; instead they yield to what they feel. To be understood by the physician, as evidenced by the history-taking, is itself relieving, perhaps because it indicates this condition is not so unique and that others' experiences can be called upon. Also, to be credited with trying to deal intelligently with this baffling situation is gratifying.

The function of the physician briefly is to lead the patient to lean on inner resources he had not thought he could count upon. This is the difficulty with using tranquilizers, which, patently, are "outer" resources. They are promised, in effect, to be capable of controlling the dreaded tension. The first question the phobic individual asks himself is "What if the pills don't . . . ?" But he may be willing to go along—he can add pills to his present devices of control. Some are reluctant to take pills lest they discover yet another disappointment—they'd rather not know if the measure will fail. What they seek is 100 per cent protection against tension, feeling they cannot afford to have *any*. They are bound to be disappointed. Pills should never be given pro re nata to such patients. This leads to constant consulting of oneself as to his state of feeling—"Is it time to take the pellet, . . . if I take it now will I wish I'd saved it, will I then be defenseless, . . . if one doesn't do the trick, ought I to take two?" A tranquilizer *can* be given on a regular basis, but the manner of suggesting it must be minimizing—on the order of "I have no objection to your taking these things." The physician must make clear by his attitude as well as his words that the patient would get along just as surely and possibly no less comfortably without pills. To be sure, phobic symptoms not infrequently have been flushed out by a depressive reaction. In these cases treatment of the underlying depression is more important.

A question arises as to whether an authoritative physician precipitates panic in these fearful people—an iatrogenic result from inappropriate technic—or whether, on the other hand, the phobic individual seeks the protection of a strong personality as physician and then senses that this will not do—he has "trapped" himself once again into a fretting defense against anxiety and dare not abandon it. Be that as it may, the doctor handling such a patient can reassure him where it counts by minimizing his prescriptions and his own presence as in any way essential to the patient's safety. The key instruction to the patient is to let the worst happen, to refuse to protect himself from anxiety. Fear diminishes ultimately in proportion as it does not "matter" to the patient to be anxious. This means accepting an immediate increment of tension, for the devices he is instructed to refuse were not devoid of effectiveness—they simply were not far-reaching enough and in the long run served only to magnify and fix the abnormal fears.

The Future of Tuberculosis

Tuberculosis Abstract

A LOOK AT THE FUTURE may perhaps best summarize the important aspects of tuberculosis and its treatment, giving a slant to the trends of tuberculosis control and eradication.

There is reason to believe that the recent precipitous downward trend in the mortality of tuberculosis will slacken in the years ahead and that the incidence of new cases will continue to be significant as long as the large community reservoir of tuberculosis of uncertain activity is fed from so many sources.

The eradication of tuberculosis is no longer a local or a national problem, but a world-wide concept needing cooperation and support on a community as well as on an international basis.

Tuberculosis, having become an affliction of older people, should witness a fall in incidence at the members of the older generation pass on with their disease. The present younger generation, with a low infection rate, will in time take its place with less open disease more adequately treated and probably with good chemoprophylactic control of their infection. But this is a slow process, in which Darwinian survival and elimination will still play their part in treatment and prevention.

Tuberculosis has always been a family disease, most prevalent and devastating when families were commonly larger than they are today. But whatever occurs in the family size, home care of tuberculosis, unless carried out with meticulous regard for its infectiousness, may well influence the epidemiology of tuberculosis unfavorably in the future. However home care is managed, the family physician—whether he is internist or general practitioner—will continue in a key position in the use or abuse of the measures of control.

TUBERCULIN TEST

The tuberculin test will become increasingly important as the infection rate of tuberculosis falls. When the older age groups contain an increasing number of nonreactors, the tuberculin test will gain increasing usefulness in both case finding and the differential diagnosis of pulmonary lesions. The continuing record of the individual tuberculin reactor will be followed from the date of conversion to a positive tuberculin test. Depending on the age of the child or adult, this record of tuberculin-conversion—a sort of tuberculin case registry—will determine the need of treating the primary infection before the signs of overt disease appear.

In a current series of medical progress reports, the author takes a long look at the present situation in tuberculosis therapy and control. His summary is also a forecast of the future course of this ancient disease.

The abstract is furnished by the National Tuberculosis Association and is from an article by Theodore L. Badger, M.D., which appeared in the *New England Journal of Medicine*, July 16, 1959.

Chemotherapy of the tuberculin converter to positive will become more widely used in infants under three years and in adolescents over fourteen years of age.

Isoniazid will be applied more widely as a preventive in the groups past forty years of age with known old lesions of uncertain and potential activity. Chemotherapy will be used for longer periods, perhaps indefinitely in those who have completed standard initial regimens but who end with open cavities unsuitable for surgery or with characteristics of instability in their lesion.

Better drugs may be found in the future. But isoniazid will undoubtedly be found efficient in

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Tranquilizers—Continued

Above all, the physician must be consistent, not himself so anxious that he cannot refrain from participating in the patient's frantic efforts to insure himself against tension. He will achieve this consistency when he knows whereof he speaks—something of how the phobic individual looks at and tries to manage himself; certainty as to the benignity of such an uncomfortable affection as anxiety may be. And the patient must know he understands; handing pills to him as he lopes through the office is to the phobic person like a kind word to the imminent bankrupt—a recognition nothing can "really" be done to stave off expected disaster.

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controlling bacilli that break loose from dense cellular structures or from the heart of caseous lesions.

Concepts of adequate versus inadequate chemotherapy will without question greatly alter the future control of tuberculosis.

BCG will in the future have decreasing usefulness in communities and nations that have become sophisticated in modern chemotherapy and the use of isoniazid in the prevention of the complications of primary infections.

Future of Sanatoriums

Sanatoriums, though fewer in number, will continue for the care of the long-term cases of tuberculosis. It seems inevitable and proper that initial care of acute tuberculosis will move more and more into the general hospitals.

Tomorrow, the tuberculosis sanatoriums may take on community leadership in the treatment and control of tuberculosis. They could encourage friendly relations with the family doctor and the thoracic physician or surgeon who will care for their patients after discharge. They could gain the confidence of patient and referring physician by a close understanding that comes only with intellectual "give and take" with a diffusion of knowledge between those inside and outside the sanatorium, both of whom are interested in tuberculosis and guard the welfare of their patients. The future holds a neat opportunity for the sanatoriums that work closely and intelligently with the family physician, and their continued survival may depend on such cooperation. In these days of home care of tuberculosis the opportunities of the sanatorium for undergraduate and postgraduate community education in tuberculosis could be very great and this deserves serious thought.

The x-ray will continue to be the most important tool in chest diagnosis in spite of radiation hysterias. Manufacturers will produce safer x-ray machines and better protective devices but only if radiologists can be persuaded to use them and patients can be urged to request them.

General hospital admission x-ray programs for those over thirty years of age will be given wider recognition for their usefulness in case finding for both tuberculosis and cancer of the lungs. In the old-age groups that populate general hospitals, there is interest not only in finding the new and unknown cases of tuberculosis but also in re-locating the known recalcitrant and the unknown relapses found by chance.

Education in tuberculosis will be a continuing job in the future among members of the medical profession and the laity. Research will require larger funds as the task of eradication becomes more difficult. The time has passed for being impressed with either the decreasing mortality or the specific number of reportable cases of tuberculosis. Rather, one should gear all planning toward the many more millions of people who are infected with tubercle bacillus and toward those who are the potentially active cases of tuberculosis of the future. The importance of following known, treated tuberculous persons for the prevention and detection of relapse will be a far tougher job in the future than the detection of new active cases of tuberculosis.

The goal of eradication of tuberculosis, ephemeral as it may be, will not even appear on the horizon until the perspective of both national and world-wide control is understood by every community, no matter how small. There are years of intensive and imaginative work ahead. There is probably no short cut to the ultimate victory. Tuberculosis is still embedded in people in every corner of the world, and world-wide cooperation and expenditure of both energy and money will be needed for many years.

WOMAN'S AUXILIARY

(Continued from page 140)

Relations Day October 26. Lunch was served to guests who were members of representative civic organizations and Dr. C. Howe Eller, County Health Commissioner, spoke on "A Newcomer Looks at St. Louis and St. Louis County Health Problems."

Christmas gifts for patients in the County Hospital were contributed by members of St. Louis County Auxiliary.

I believe that this brief summary of some of the activities of some of our members indicates that we are indeed "a group of friendly women, working together for the betterment of the community health and safety."

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Clinical reports on Dartal: 1. Edisen, C. B., and Samuels, A. S.: A.M.A. Arch. Neurol. & Psychiat. *80*:481 (Oct.) 1958. 2. Ferrand, P. T.: Minnesota Med. *41*:853 (Dec.) 1958. 3. Mathews, F. P.: Am. J. Psychiat. *114*:1034 (May) 1958.

SEARLE

A Special Article by **PROCTOR N. CARTER,** ***Jefferson City***

New State Law on Hospital And Nursing Home

Care of Public Assistance Recipients

I APPRECIATE the opportunity to be with you this evening to discuss legislation enacted by the 70th General Assembly, which provides for payment of hospital care for recipients of public assistance, and also provides payments up to $100 per month to those on assistance rolls who are completely bedfast and totally disabled. The General Assembly limited the hospital care legislation to assistance to recipients entering hospitals because of "a medical emergency or acute serious illness."

Both of these new provisions affecting public welfare in this state became effective August 29, 1959. With the passage of House Bill I, which provided for these legislative changes, Missouri became the 44th state to provide some type of medical or hospital care, or both, to those on public aid rolls.

Before describing the new legislation and preliminary planning which went into preparation for the new programs, I think you might like some general information concerning the responsibilities of the State Division of Welfare since it is, perhaps, the largest state agency, in terms of the number of people served and the total amount of money expended. The Welfare Division administers the public assistance programs of Old Age Assistance, Aid to Dependent Children, Permanent and Total Disability, General Relief, Aid to the Blind and Blind Pensions, and State Child Welfare Services. In October 1959, the number of persons on public assistance rolls in this state, including all of the above-mentioned categories, was 237,765. Of this number about 50 per cent represented persons over 65 years of age; 37 per cent were children under 18, and their mothers; 10 per cent were persons with disability sufficient to render them incapable of employment, and about 3 per cent were blind persons. From these figures, it can be readily seen that most of those on welfare lists are persons who must have help regardless of economic conditions since they cannot be considered to be in the labor market, and the majority are in age brackets or physical condition most likely to need medical or hospital care.

During the present biennium, which will end July 30, 1961, state and federal funds for welfare purposes will amount to more than $291,000,000 with the state providing from general revenues about $105,000,000. The welfare program is costing, therefore, about $12,000,000 per month.

To bring the figures, in terms of individuals affected and dollars spent, down to the 12 county area represented here this evening, we find that in these 12 counties there are a total of 11,996 persons on public assistance rolls, with an expenditure for their care during the fiscal year 1958-1959 running to $7,100,000.

Rules and Regulations for the Hospital and Nursing Home Care of Missouri Public Assistance Recipients as given is especially appropriate with the law having become effective August 29, 1959. Developments to the present time are given.

Mr. Proctor N. Carter is Director of the Division of Welfare of the State of Missouri. This presentation was given at a meeting of the Fifth Councilor District held in Columbia on November 19.

There has been a growing need during the last few years for provisions to meet the needs of indigent persons requiring hospital care and for higher payments to persons on the assistance rolls who are disabled and bedfast, and consequently require considerable nursing care. This need has been accelerated by changes in our population which show that we are fast becoming a nation of older persons. Today there are about 470,000 persons 65 years of age and over in Missouri, representing one out of every nine persons in the population of the state. In 1900, there were only 113,000 aged persons, or one out of every 25 Missourians.

Expressed in another way—while the total population of the state has increased by about 50 per cent since the turn of the century, the aged population has increased more than 400 per cent. This trend is expected to continue in the future, reaching an estimated figure of 576,000 aged persons by 1970. Without going into all the complex problems that the aging present to the community, one can determine easily the implications of the rapid growth of this group on the need for hospital and nursing care. There is ample research showing that the incidence of chronic disease and disabling illness is higher in later life, thereby requiring more medical, surgical and hospital facilities, as well as an expansion in nursing home facilities.

Since Missouri has had no medical care or hospital care program for the aged or for other persons receiving public assistance, many persons and organizations have given increasing thought and attention to this problem in recent years. Missouri had a medical care program in 1934-35, financed by federal FERA funds, but since that time medical care for assistance recipients has been spotty. In a few counties the county court can and does pay for medical care for indigents; in some cities there are hospitals which will care for residents of that particular city; and in some cases, an assistance recipient may have enough money left out of the $65.00 monthly welfare check so that he can pay something on his doctor or drug bill.

Pettis County, Missouri, has a rather unique plan for medical care of indigent persons, and the plan has been worked out locally without state or federal aid. The plan works in this manner: The Pettis County Medical Society and Pettis County Osteopathic Association have agreed to treat indigent persons without charge, with the doctors participating by donating their services; the drug stores of Pettis County have agreed to furnish drugs at 5 per cent above cost; the Bothwell Hospital gives care to indigents at $7.85 per day; the County Welfare Office designates persons eligible for medical and hospital care; and the county court pays the bill, which last year amounted to $31,859. The plan provides full medical care for all indigent persons in the county, and, as I mentioned, is a completely local effort. All participants in the plan are well aware of the medical, social and economic problems involved and constant efforts are exerted to minimize expense and still provide adequate medical coverage.

When the federal Social Security law was revised in 1956, making additional federal funds available to the states to match state funds spent for medical care, it signalled the start of new programs in a few states, and an expansion of programs in a number of others. While there is some variation throughout the country in the matching ratio of federal to state funds, in our case we receive a little more than one federal dollar for each state dollar spent for this purpose. In other states the programs, some of which have been operating since the 1930's, vary greatly in extent of coverage. About 16 or 17 states have plans which provide payment for all types of necessary medical care, while the rest have more limited programs, including a number in which hospital care is the only type paid for through vendor payments.

The State of Illinois has one of the most complete medical care programs for the indigent in the United States. The total cost for all medical care services is about $35,000,000 annually. Of this amount, approximately $11,000,000 goes for hospital care. Other services rendered include the physicians' services at home, in nursing homes, in hospitals or in the doctor's office; drugs and drug supplies; clinical care; nursing home care; dental care; appliances and glasses. Payments to the hospitals are made on the basis of the hospitals' regular charge for services to the general public. The physicians are paid on a fixed fee basis. There is a medical advisory committee in each county in the state, and there is a state medical advisory committee to advise the Department of Welfare.

Beginning in 1956, the Division of Welfare, trying to plan ahead to the day when the legislature might start some type of medical care program in Missouri, endeavored to lay the groundwork for a sensible, sound program through the following steps:

1. We have met with representatives of the federal Department of Health, Education, and Welfare, both at the regional office in Kansas City and in their Washington office to discuss plans in operation in various states.

2. At various times we have discussed the program and problems with representatives of the welfare departments of a number of states now operating such programs, and have accumulated copies of their written material, forms and instructions.

3. Here in Missouri we have explained the changes in the federal law and have asked for suggestions and advice from a number of interested groups, including the Medical Economics

Committee of the Missouri State Medical Association; a joint committee from the Missouri Hospital Association and from the Osteopathic Hospital Association; and a group made up of the executive secretaries of the various state associations in the health field.

4. We met with the officials of the Blue Cross in St. Louis and in Kansas City, exploring the possibility of operating a program by purchasing their services. With the limited program now operating in Missouri, the use of Blue Cross services does not appear to be feasible at this time.

To finance House Bill I, the last legislature appropriated \$1,000,000 as the state's share of the cost of the hospital care program for two years. Federal matching funds will amount to \$1,146,840, making a total of \$2,146,840 available for the biennium.

In comparing this appropriation with the funds being spent in other states, it was evident that Missouri must start on an extremely limited basis. For example, I mentioned that Illinois is spending about \$11,000,000 per year for hospital costs alone, and Oklahoma about \$5½ million, compared to our \$1,000,000.

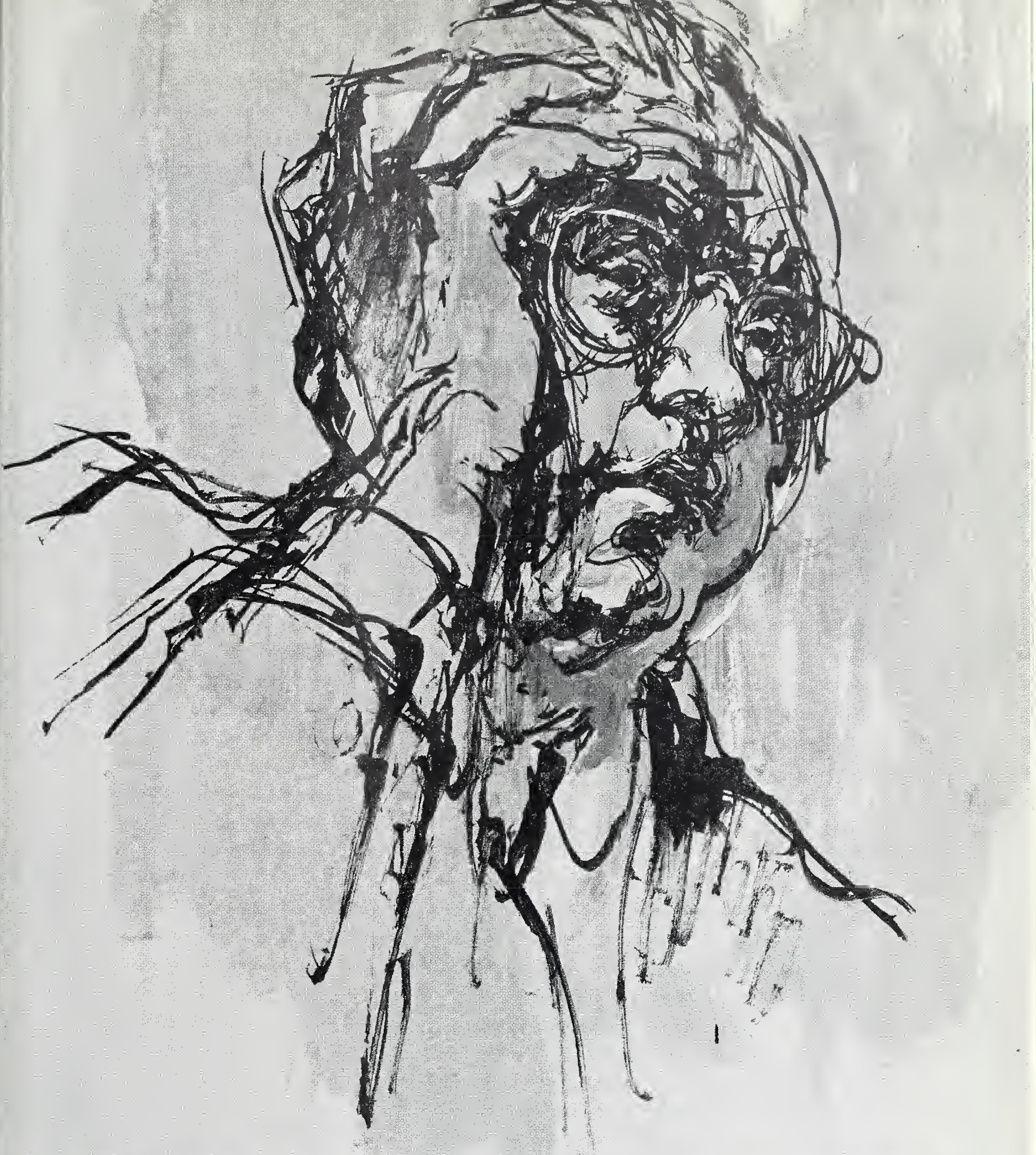
Almost the last action of the legislature prior to adjournment on May 31, was the passage of House Bill I. Through amendment to the bill, in the closing moments of the session, provision was made for an Advisory Committee to provide professional and technical consultation to the Director of Welfare on medical care for public assistance recipients. The law establishing this committee reads as follows:

"The Director of the Division of Welfare shall appoint an advisory committee to provide professional and technical consultation in respect to the medical care aspects for public assistance recipients as set out in this chapter. The committee shall consist of seven members, at least three of whom shall be physicians licensed to practice in this state, the others shall be persons interested in hospital administration, nursing home administration and nursing. The members of the advisory committee shall receive no compensation for their services other than expenses actually incurred in the performance of their official duties."

The following persons were named to the Medical Advisory Committee: Dr. Stanley Peterson, Chairman of the Committee on Aging of the Missouri State Medical Association, Springfield; Dr. Avery Rowlette, Chairman of the Committee on Medical Economics of the Missouri State Medical Association, Moberly; Mr. G. O. Lindgren, Administrator, Trinity Lutheran Hospital, Kansas City; Dr. Gilbert H. Kroeger, President-Elect, Missouri Association of Osteopathic Physicians and Surgeons, Bethany, Missouri; Mr. Louis Handley, Treasurer, Kirksville College of Osteopathy & Surgery and Former President of Missouri Osteopathic Hospital Association, Kirksville; State Senator Albert M. Spradling, Jr., Chairman of the Senate Committee on Health and Welfare, Trustee of the Southeast Missouri Hospital, Cape Girardeau; Sister Mary Isidore Lennon, Director, Social Service Department, St. John's Hospital, St. Louis. In addition, the executive secretaries of the Missouri State Medical Association, the Missouri Hospital Association, and the Missouri Association of Osteopathie Physicians and Surgeons serve as ex officio members.

Between May 31, when the legislature adjourned, and August 29, the date the legislation became effective, procedures were worked out to put into effect the hospital care program and payments to the completely bedfast and totally disabled. These procedures were developed through consultation with medical consultants of the State Division of Welfare, representatives of the Hospital Licensing Section of the Missouri Division of Health and the executive secretaries of the Missouri Hospital Association, and the Missouri Osteopathic Hospital Association. A meeting was held with the Board of Trustees of the Missouri Hospital Association and our policies and procedures were outlined to this board.

At the first meeting of the State Medical Advisory Committee, the regulations and procedures were reviewed. One of the major questions revolved around the definition of "medical emergency or acute serious illness." It was determined that the phrase in the law should be construed to mean an emergency or illness that "placed the patient's life in danger and, consequently, required immediate hospitalization." Since the program has been in effect for the last two months, many hospitals have been sending bills for hospitalization of indigent persons who have been hospitalized for various ailments which do not appear to fall within the definition or the law. These claims are reviewed by the Medical Consultant to the Division of Welfare to determine if the final diagnosis shown on the claim indicates that the condition of the patient appeared to be "life endangering." If the decision is that the condition is not life endangering, the claim is returned to the hospital as disallowed. The situation is improving as a result of correspondence with hospitals, personal contact with some of the larger hospitals, and more explanatory informa-



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Another major question considered by the Advisory Committee was concerned with the question of payments to the hospitals. It was pointed out that the $2,000,000 federal and state appropriation for the biennium would have to carry through the biennium. It was realized with the low appropriation that full hospital bills for indigents could not possibly be met. Consequently, a plan was developed which provided that monthly payments to all the hospitals would be made after taking into consideration the amount of money available for the month and the number of per patient hospital days, on a pro rata basis. This would give all the hospitals participating in the program a fair share of the money available. You might be interested in knowing that of the 167 licensed hospitals in Missouri, 88 are participating in the program; 20 have indicated they do not care to participate at this time and the remainder have given no indication as to their plans. In the beginning months of the program, it was determined that a $5.00 per patient per day payment would be the maximum allowed. It was further agreed, however, that after the first of the year this would be reviewed in the light of the appropriation to determine if some upward revision should be made.

As expected the first month's payment covered a small group of recipients. Payments in the amount of $5,754 were made in behalf of 167 recipients who were discharged from participating hospitals during the month of September. Through November 13, a total of $22,442 was spent for 4,048 days of hospital care. A total of 518 persons have been admitted, discharged and hospital payment made. The average stay in the hospital for assistance recipients is about nine days. It might be pointed out that it was agreed with the Advisory Committee that a limit of 20 days hospitalization per year would be permitted to any individual recipient.

Still to be resolved in the future when there has been enough experience so that trends may be forecast are the questions: (1) Whether the definition for admittance to hospitals should be liberalized; and (2) a review of the payment plan to determine if and when the temporary maximum of $5.00 per patient day can be removed or raised.

Now for a few minutes to describe the change in law which provides for a maximum payment up to $100.00 per month if the assistance recipient is, as stated in the law, "completely bedfast and totally disabled." This is not a new assistance program, but merely allows an exception to the present maximum payment of $65.00 per month which can be made to an assistance recipient.

The legislature appropriated $2,000,000 in state funds for this purpose. That money will also be matched a little better than dollar for dollar with federal funds, which means that there is about $4¼ million dollars available for such added payments in this biennium. By the middle of November, $55,389 had been spent for care of the bedfast. The number of persons approved to date is 1,622.

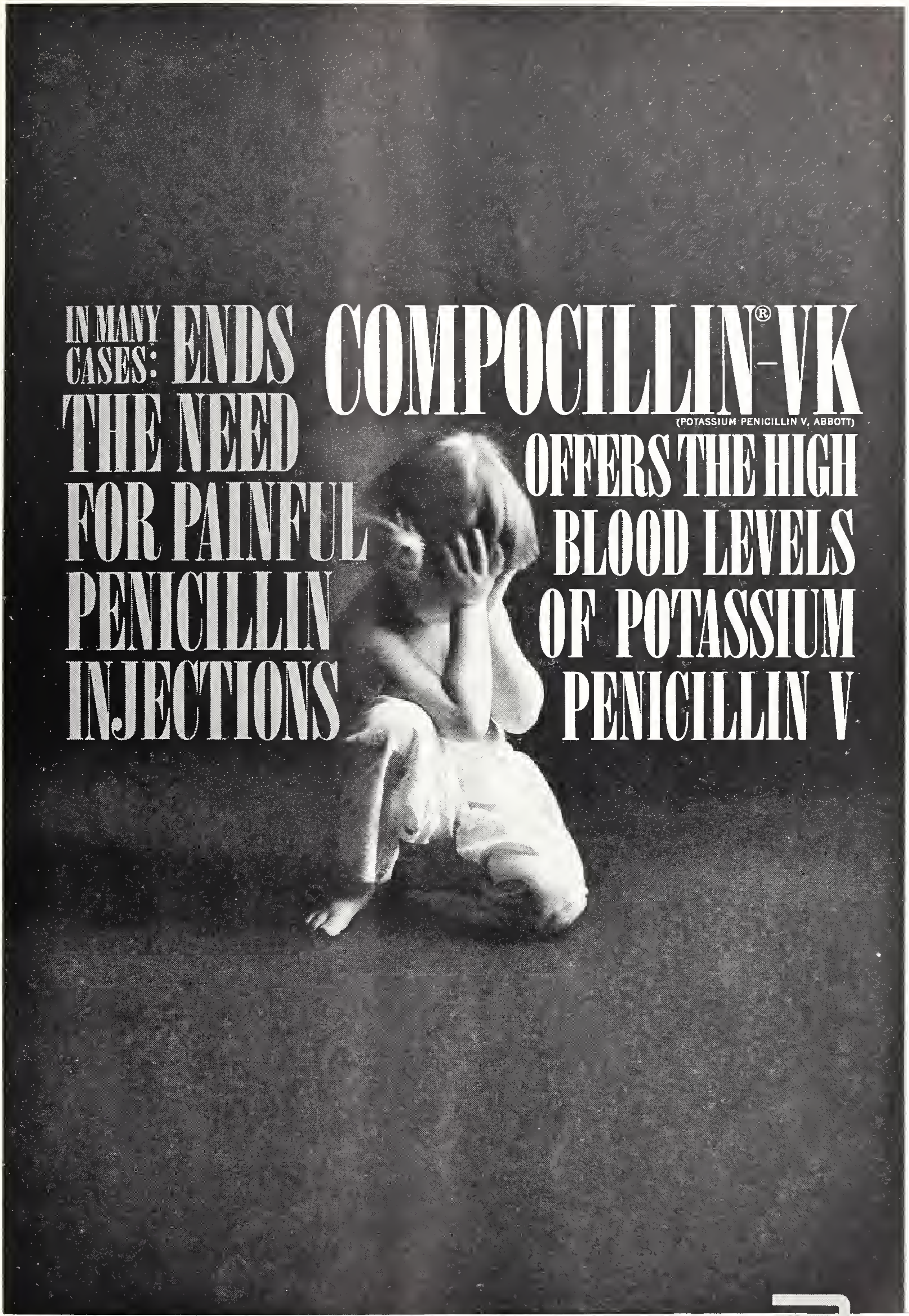
Payment is not limited to persons who are in nursing homes—they may be living in their own homes and receive the added payment if they are found eligible under a very limited definition. Persons who appear to be eligible must be examined by a physician designated by the Division of Welfare, and he then certifies whether or not the person is completely bedfast and totally disabled. Here, too, the Division of Welfare has established a definition against which the physician must measure the claimant. It provides that the person must be completely unable to leave the bed except by being lifted, and that the probability is he will have to remain in bed for at least 90 days.

At the meeting of the Medical Advisory Committee, consideration was given to payment from state funds for examinations by physicians to determine eligibility for the increased assistance payments. We were unanimous in the agreement that is was not desirable to set physicians' fees or to set a maximum payment. Our experience since August 29 has indicated that the examinations, most of which involve home calls, have been reasonable, averaging about $7.50 per examination. The total amount paid to physicians for medical examinations for all programs last month amounted to approximately $13,000.

I want to assure all concerned with the programs of the Division of Welfare that we desire to be reasonable and flexible in working out policies. I am pleased to have an advisory board of such high caliber, and assure you that I intend to listen carefully to the recommendations of this Board.

I am sure I have been unable to cover all the points in which you might be interested, and I shall be glad to try to answer any questions that you may have.

Thank you for inviting me to your meeting.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Ralph Perry, M.D.

President's Message

The program for the 1960 Annual Session appeared in the January issue of Missouri Medicine and appears in more detail in this issue.

The program is one that compares favorably with past programs of the Association and with those of almost any other scientific organization, and the Committee on Scientific and Postgraduate Work is to be congratulated on it.

However, this year, the committee has attempted, while making this an excellent program, to make it a stepping stone to continually better programs and better sessions of the Association. The committee is studying the attendance at former sessions to learn who attends, why they attend and from where they attend—all in view to making the session attractive to more members and guests of the Association. The session will be watched more closely this year to determine the parts that are worthy of repetition and those that should be changed. And this will apply not only to the scientific part of the session, but to the over-all plan.

Make plans now to attend the session, March 13, 14, 15, 16, at the Sheraton-Jefferson Hotel, St. Louis. And if you have constructive criticism or suggestions, give the committee the benefit of your thoughts.

Ralph Perry

EDITORIALS

MEDICINE FOR LONGER LIFE

While the pharmaceutical industry is under scrutiny for costs of medications, the Health News Institute points out the reason that manufacturers introduce hundreds of new medicines every year—and the Institute does not state, but each one is after extensive research without doubt. The reason for the many new medications given is that the nature of disease changes with the changing pattern of the population.

For example, since 1950, the number of Americans more than 65 years of age has increased from 12,000,000 to 15,000,000. And population experts estimate that by 1970 the proportion of this age group will increase still further, while the percentage of Americans between the ages of 25 and 44 will decline.

And age problems change from age group to age group. In 1956 more than 854,000 Americans died from some form of circulatory and heart disease. Of these approximately 609,000 were more than 65 years of age. In other words, 42 of every 1,000 Americans more than 65 years of age died of circulatory and heart diseases, as compared with 1.6 deaths from circulatory and heart diseases per every 1,000 Americans under that age.

Cancer is another example of the change in disease patterns with change of age of population. Although cancer strikes people at every age, it is particularly virulent among those more than 65. In 1956 about 247,000 Americans died of cancer. Of these, about 130,000 were more than 65 and 117,000 were less than 65. This means that 906 of every 100,000 Americans more than 65 died from some form of malignancy in 1956, while only 77 per 100,000 of those less than 65 died of cancer.

As a result of this, pharmaceutical manufacturers are diverting more and more of their research into the development of medicines for heart disease, cancer and the chronic ailments which beset the older age group.

HEALTH INSURANCE IN THE 1950's

Rapid growth marked the health insurance field throughout the 1950's, reports the Health Insurance Institute.

The year 1959, following the pattern set earlier in the decade, maintained a steady record of progress in the number of persons covered by some form of health insurance and the amounts of benefits paid through health insurance.

At the beginning of 1950, some 66 million persons had hospital expense insurance and the number grew to 123 million at the end of 1958. A preliminary sampling indicates that the 1959 year-end coverage figures will exceed 125 million.

Benefit payments during 1949 were $957 million. By 1958, the benefits had climbed to $4.7 billion, and records during the year give evidence that the 1959 total will reach $5 billion.

Progress during the 1950's was marked by new types of insurance—surgical expense insurance, regular medical insurance, loss of income and major medical expense insurance.

From 1950 to 1958 the number of persons with surgical insurance rose from 41 million to 111 million, while those with regular medical insurance rose from 17 million to 75 million. Major medical insurance was a development also of the decade.

The first major medical plan was launched in 1949 and at the end of 1951 more than 100,000 persons had this form of health insurance protection and at the end of 1958 more than 17 million persons had major medical insurance.

A new coverage which came into prominence during 1959 was the mass enrollment technic which makes available coverage on a wide-scale, nonselective basis regardless of the health of the person seeking the insurance. This new type of insuring technic is expected to have great growth in the coverage of persons more than 65 years of age.

Ramblings of the Field Secretary

A national conference on "The Medical Aspects of Sports," sponsored by the American Medical Association, was held at the Baker Hotel, Dallas, Texas, on November 30, 1959, preceding the AMA Clinical Conference.

This one day session pointed out the increasing interest and concern of the medical profession in protecting the health of athletes. This can be taken for granted, however, when one considers the tremendous interest in all types of athletics and sports today. This seems to encompass all age groups and thereby poses many problems for the health and safety of the participants.

At the luncheon session of the day's program, Mr. Homer C. Wadsworth, Chairman of the President's Citizens Advisory Committee on the Fitness of American youth, gave an interesting discussion on "Youth Fitness Today." At the evening session Mr. Avery Brundage, Chairman of the International Olympic Games Committee, was the featured speaker. He gave an interesting history of the development and progress of the Olympic Games to date and then showed a movie entitled, "The Modern Olympic Games," which pictured actual events which occurred at the 1956 Olympic games.

The morning and afternoon sessions were filled with talks and panel discussions on many of the medical aspects of sports. The following excerpts are taken from statements made by the speakers and discussants at these sessions:

"The grave concern shown by the medical profession has emphasized the importance of the medical aspects of sports, and shown the need for the qualified technician trained as Teacher-Athletic Trainer-Physicial Therapist." "The medical profession now recognizes modern sports training as an important means in the discovery of better ways of developing human vitality and zest for living."

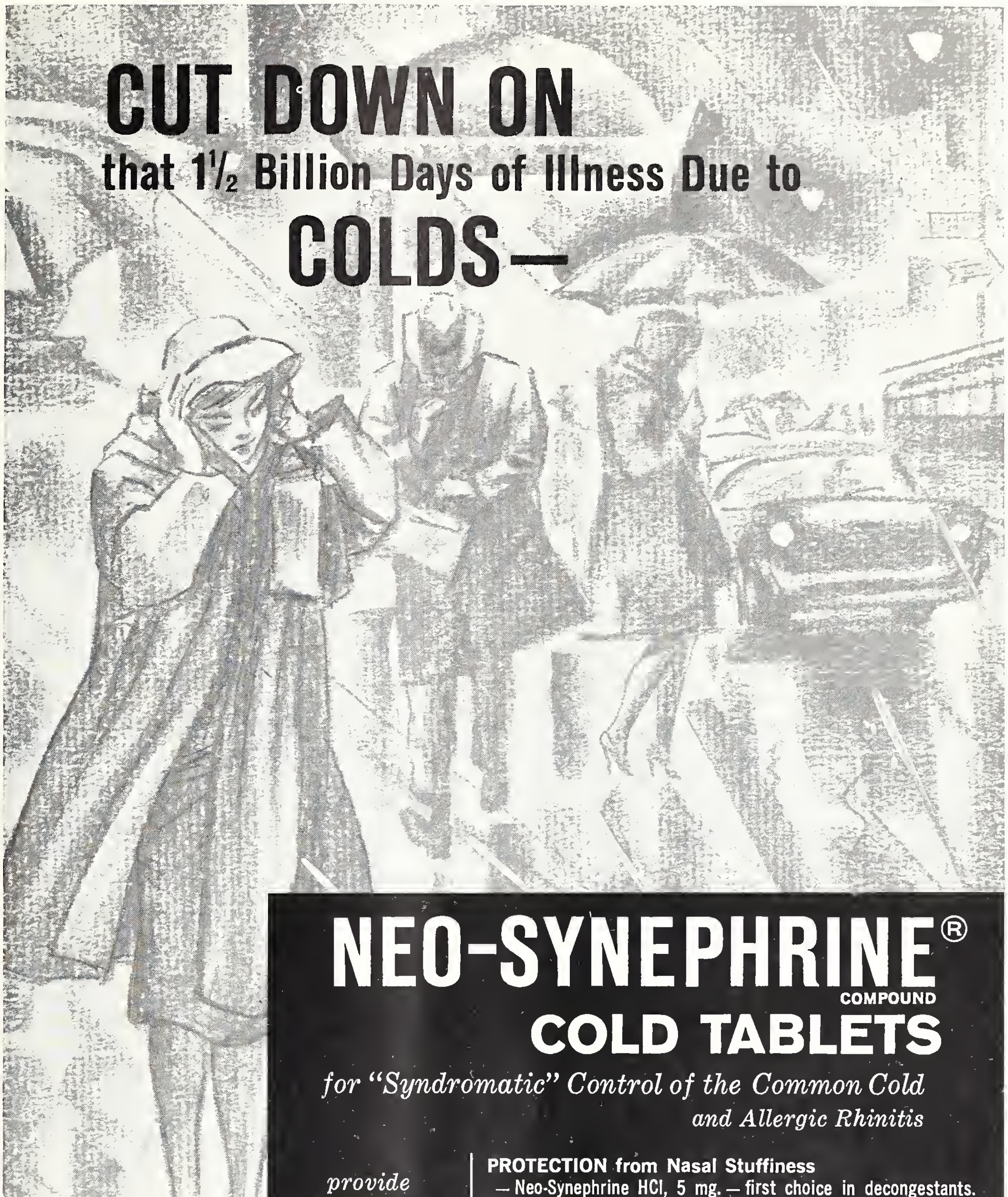
"This is especially true of sports where endurance is a primary factor. Our better coaches have much to give, as well as to learn, through closer cooperation with those in the medical profession." "The value of physical conditioning to prevent injury is especially important in the large number of 'week-end athletes.' Carry-over of conditioning at week and season intervals is insufficient. The week-end athlete, therefore, runs the risk of peak activity without benefit of its conditioning effect. Many athletic injuries occur when muscles are too weak or too inflexible to respond adequately to trauma. This insufficiency of muscles is even more important in prevention of recurrent injury. Exposure to identical trauma is unavoidable in sports. Protection of previously injured joints and muscles by complete rehabilitation is a 'must.' Systematic therapeutic exercises restoring full strength and flexibility of muscles are the best preventive measure."

"The on-field duties of the team physician require an adequate knowledge of the general physical status of the team members. He should refresh his knowledge of the condition of previously injured players as to their present status and capabilities. Careful observation of the team as a whole is important, particularly on kickoffs and open plays, where blocking and tackling may produce injury. Removal temporarily of any player injured sufficiently to require time out is essential. A "half-time" survey of the team, inconspicuously done, is a vital part of the team physician's responsibility, as is the check-up after the game. The trainer and the team doctor should be a team in themselves."

"Injuries of the upper extremity usually can be categorized in three general groups. Contusions and similar injuries comprise the majority of conditions seen during a game. Dislocations of the shoulder, elbow or fingers occur occasionally, while fractures are quite common. Injuries such as acromioclavicular separation are difficult to diagnose in the period available to observe a player during a time-out. For this reason, when thought necessary, insist on removing a player from the game to more adequately examine him, either at the bench or in the 'half-time' room."

"Two basic decisions must be made by the doctor himself on the playing field whenever a player is injured: (1) Should he be removed from the game? (2) If removed, should he walk or be carried on a stretcher? No player with a vertebral column injury should be allowed to walk. Cervical spine injuries must be held in traction, manually, until definitive diagnosis and treatment at a hospital have been established. The high incidence of concomitant intracranial and cervical spine injuries must not be forgotten. Players with obviously severe lower extrem-

(Continued on page 184)



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News—Personal and Professional

The Greater Kansas City Academy of Pharmacy was addressed on November 22 by **Waldo S. Holt**, M.D., Kansas City, on "Have You Your Best Foot Forward?"

The surgical staff of St. John's Hospital in Joplin recently elected **Lewis H. Ferguson, Jr.**, M.D., Joplin, as chief of the surgical service.

The Morgan County Chapter of the American Cancer Society was addressed this fall by **Ruth Kauffman**, M.D., Versailles, on "The Seven Danger Signs of Cancer." Dr. Kauffman was elected medical advisor of the chapter.

A program before the Cape Girardeau Rotary Club in which the need for foster homes was discussed was under the direction of **Harold D. Ridings**, M.D., Cape Girardeau.

Physicians were guests at a dinner given by Central Missouri State College, Warrensburg, one of a series of dinners given by the administrative council of the college to better acquaint townspeople with the college.

Officers of the staff of Missouri Baptist Hospital, St. Louis, taking office on January 1 were **C. H. Kilker**, M.D., St. Louis, chief of staff; **Robert Smith**, M.D., associate chief of staff; **Warren M. Lonergan**, M.D., secretary, and **P. C. Hall**, M.D., **George Anstey**, M.D., **Drennan Bailey**, M.D., and **E. M. Cannon**, M.D., members of the executive committee.

An honorary life membership in the American Social Hygiene Association was presented to **Abraham Gelperin**, M.D., Kansas City, at the annual meeting of the Kansas City Social Hygiene Society on December 8.

The Kansas City Southwest Clinical Society elected **Richard H. Kiene**, M.D., Kansas City, as president at a meeting early in December.

The International College of Surgeons recently elected **Donald M. Dowell**, M.D., Chillicothe, as a vice regent for Missouri.

More than 300 visitors attended an open house at the General John J. Pershing Memorial Hospital in Brookfield late in November.

The Bucklin P.T.A. was addressed by **E. K. Musson**, M.D., Macon, district health director. He discussed a health program for Linn County.

The staff of St. Mary's Hospital, Kansas City, recently reelected **James D. Bennett**, M.D., as president of the medical staff. Other officers are **Maurice F. Perll**, M.D., vice president; **George C. Kealhofer**, M.D., secretary-treasurer; **F. B. Campbell**, M.D., and **H. Kermit Knoch**, M.D., members of the joint conference staff; **James H. O'Neil**, M.D., chief of surgery; **Quenton Cramer**, M.D., chief of medicine; **David F. Eubank**, M.D., chief of pediatrics; **R. F. Wortmann**, M.D., chief of obstetrics and gynecology, and **Nicholas Jaime**, M.D., chief of general practice.

The appointment of Manson B. Pettit, M.D., formerly clinical director of St. Elizabeth's Hospital, Washington, D. C., as superintendent of State Hospital at St. Joseph, was announced in December.

Members appointed to the Advisory Council to the Division of Health to deal with the Hill-Burton program and the state hospital licensing law are **Robert Bassett**, M.D., St. Louis; **A. E. Spelman**, M.D., Smithville; **Arthur D. Markel**, M.D., Poplar Bluff; Mr. Keyton H. Nixon, Mexico; Mr. Ralph D. Foster, Springfield; James D. Hicks, D.O., Normandy, and Mr. Alex Vetter, Jefferson City.

On December 5 **Ross Melgaard**, M.D., Kansas City, was installed as Kansas City regional executive of the Sports Car Club of America.

"Mental Health Needs in Missouri" was the title of a talk by **Addison M. Duval**, M.D., Jefferson City, before the Cape Girardeau County Mental Health Association in December.

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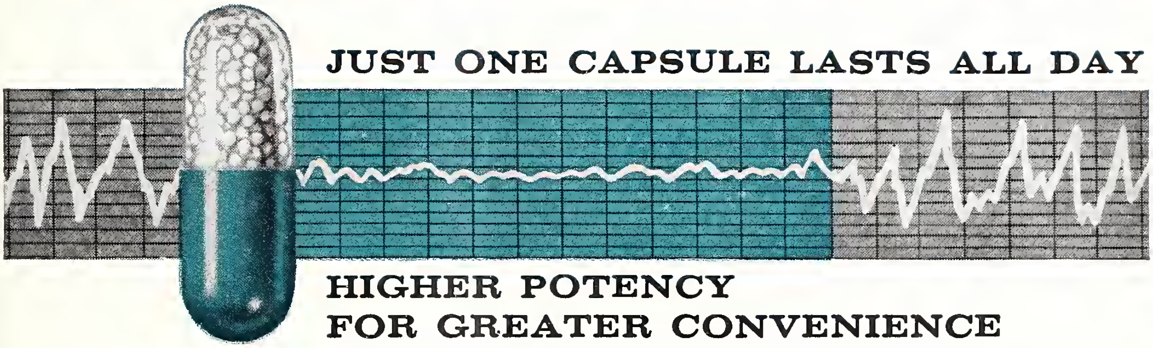

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The American Society of Anesthesiologists elected **Kenneth K. Keown**, M.D., Columbia, as vice president at its 1959 annual meeting.

At a meeting in December of the Jefferson County Mental Health Association, speakers were **Addison M. Duval**, M.D., Jefferson City, and **Louis H. Kohler**, M.D., St. Louis.

The Joplin Chapter of the Missouri State Association of Licensed Practical Nurses were addressed at a meeting in December by **Alice H. Wilson**, M.D., Joplin, on "Medication."

Recently appointed as national chairman of the Medical Alumni Division of the St. Louis University's 150th anniversary development program is **R. Emmet Kelly**, M.D., St. Louis. Associate chairman is **Jerome I. Simon**, M.D., St. Louis.

At a recent election of officers of St. Mary's Hospital, Jefferson City, **John I. Matthews**, M.D., Jefferson City, was elected president. Other officers elected were **Marshall W. Kelly**, M.D., vice president and **J. A. Ossmann**, M.D., secretary-treasurer.

Speaker for the Christmas party of the Medical Dames, Columbia, was **Vernon Wilson**, M.D., Columbia.

At a fall meeting of the St. Francois County Child Welfare Advisory Committee, **C. W. Chastain**, M.D., Farmington, spoke on the relationship between emotional well-being and physical well-being in respect to children.

An estimated 2,000 persons attended an open house in the new wing of the Boone County Hospital, Columbia, early in December.

New president of staff at the Memorial Hospital at Harrisonville is **Edward S. Jones**, M.D., Harrisonville. **Basil O. Hartwell**, M.D., Drexel, was elected vice president, and **H. A. Tracy**, M.D., Belton, secretary.

Approximately 2,000 persons attended the dedication of the new Aurora Hospital in early December.

It has been announced that **Theodore Van Ravenswaay**, M.D., Columbia, has been appointed pathologist at the Ellis Fischel State Cancer Hospital, Columbia.

The medical staff of the Independence Sanitarium and Hospital has elected **Richard G. Pugh**, M.D., as president elect. **Charles E. Nickson**, M.D., is president this year.

St. Francis Hospital staff at Washington, recently elected **B. G. Strehlman**, M.D., Union, as president of the medical staff.

The Doctors' Foundation, St. Louis, has chosen **Robert W. Kelley**, M.D., St. Louis, as president elect. **Dean Sauer**, M.D., St. Louis, is now president.

DEATHS

Henry, Clifford E., M.D., Kirksville, a graduate of Jefferson Medical College, 1896; a member of North Central Counties Medical Society; aged 85; died November 19.

Hardy, John W., M.D., Butte, Montana, a graduate of Miami Medical College, 1891; a member of Chariton-Macon-Monroe-Randolph County Medical Society; aged 96; died November 23.

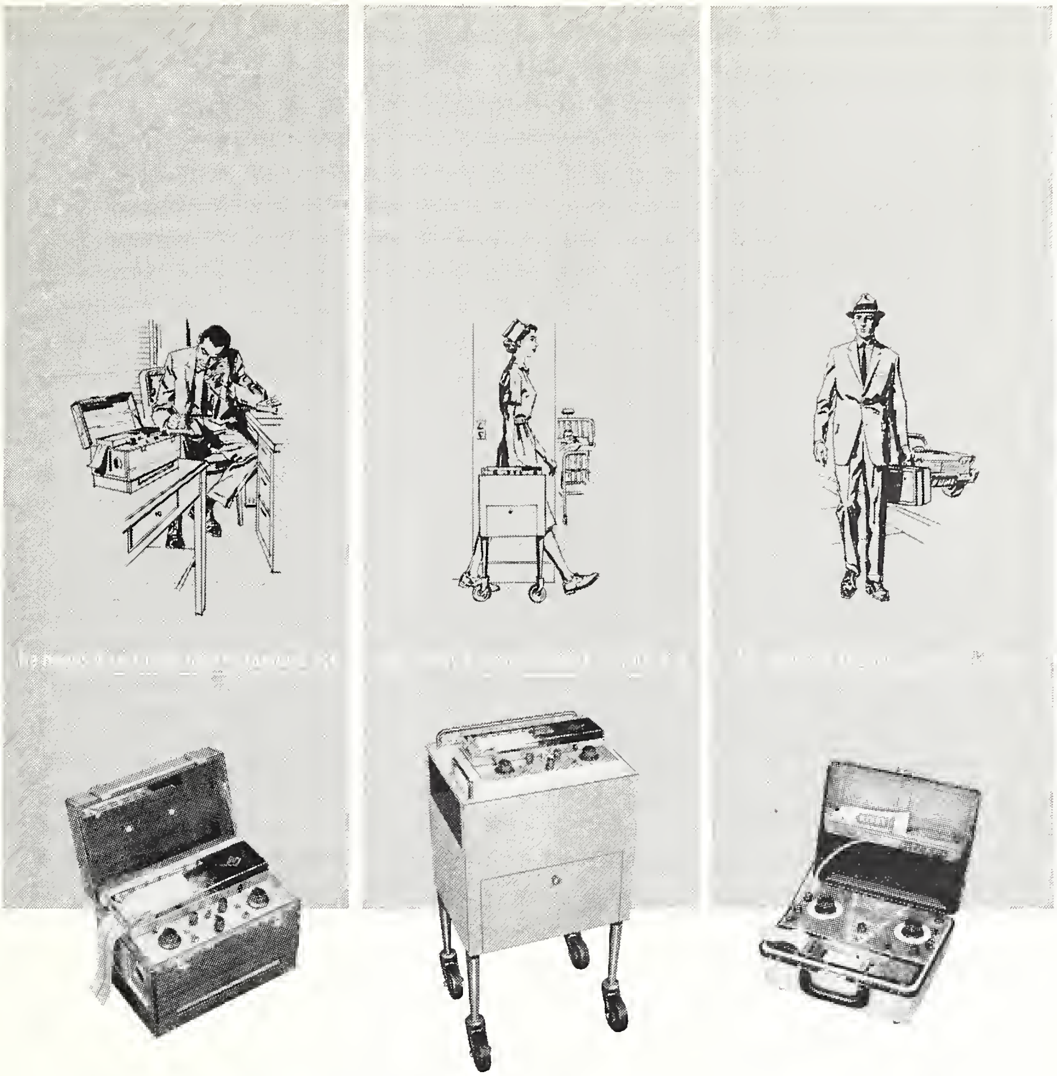
Holmes, Lemuel I., M.D., Miller, a graduate of the University of Louisville Medical School, 1910; a member of Ozarks Medical Society; aged 77; died November 26.

Freund, Newton W., M.D., St. Louis, a graduate of Washington University School of Medicine, 1904; a member of St. Louis Medical Society; aged 76; died December 4.

Westphaelinger, Henry F., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1919; a member of St. Louis County Medical Society; aged 64; died December 8.

Lindsay, John W., M.D., Conway, a graduate of St. Louis University School of Medicine, 1905; a member of Mid-Missouri County Medical Society; aged 84; died December 15.

Crossen, Robert J., M.D., Chapel Hill, N. C., a graduate of Washington University School of Medicine, 1925; a member of St. Louis Medical Society; aged 61; died December 19.



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New Members

Carl H. Almond, M.D., 807 Stadium Road, Columbia, has become a member of the Boone County Medical Society. Dr. Almond is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1953.

Howard J. Aylward, M.D., 1122 Francis Place, St. Louis 17, has become a member of the St. Louis Medical Society. Dr. Aylward is a native of Illinois, received his preliminary education in Mississippi, and his M.D. degree from St. Louis University School of Medicine in 1939. He interned at St. Louis County Hospital.

Allen Bailey, M.D., State Sanatorium, Mount Vernon, has become a member of the Ozarks Medical Society. Dr. Bailey is a native of Australia, received his preliminary education in Australia, and his M.D. degree from the University of Sydney in 1941.

Donald E. Beckman, M.D., 4205 Virginia Ave., St. Louis 11, has become a member of the St. Louis Medical Society. Dr. Beckman is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1954. He interned at Brooke Army Hospital, Ft. Sam Houston, Texas and served a residency at St. John's Hospital, St. Louis.

Joe E. Belew, M.D., 3271 January St., St. Louis 39, has become a member of the St. Louis Medical Society. Dr. Belew is a native of Missouri and received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1957. He interned at St. Luke's Hospital and is serving a residency at St. Luke's Hospital.

S. Pearce Browning, III, M.D., 4523 McKinley Ave., St. Louis 10, has become a member of the St. Louis Medical Society. Dr. Browning is a native of New York, received his preliminary education in New Jersey and his M.D. degree from Columbia University College of Physicians and Surgeons in 1954. He is serving a residency at Barnes Hospital, St. Louis.

Charles W. Chastain, Jr., M.D., 301 W. Liberty St., Farmington, has become a member of the Mineral Area County Medical Society. Dr. Chastain is a native of Missouri, received his preliminary education in Mass., and his M.D. degree from Columbia University College of Physicians and Surgeons, New York, in 1956.

James F. W. Clark, Jr., M.D., 905 Fairdale Ave., St. Louis 19, has become a member of the St. Louis Medical Society. Dr. Clark is a native of Wisconsin, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1956. He interned at Presbyterian Hospital, Chicago, Illinois, and is serving a residency at St. Luke's Hospital, St. Louis.

William R. Cole, M.D., 1401 Lawnwood, St. Louis 23, has become a member of the St. Louis Medical Society. Dr. Cole is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1952. He interned at City Hospital, St. Louis and served a residency at Cincinnati General Hospital, Cincinnati, Ohio.

W. Paul Dennis, M.D., 22 Science Street, Flat River, has become a member of the Mineral Area Medical Society. Dr. Dennis is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from the University of Missouri, 1957.

Alan F. Denk, M.D., 728 DeMun Ave., St. Louis 5, has become a member of the St. Louis Medical Society. Dr. Denk is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1954. He served a residency at St. Mary's Hospital, St. Louis.

Alvin E. Gaary, M.D., 275 Union Blvd., St. Louis 8, has become a member of the St. Louis Medical Society. Dr. Gaary is a native of Pennsylvania, received his preliminary education in Pennsylvania, and his M.D. degree from Hahnemann Medical College in 1947. He interned at St. Luke's Hospital, Philadelphia, Pennsylvania.

Elizabeth K. Gay, M.D., 390 W. St. Anthony, Florissant, has become a member of the St. Louis County Medical Society. Dr. Gay is a native of Oklahoma, received her preliminary education in Oklahoma, and her M.D. degree from Washington University School of Medicine in 1951. She served a residency at City Hospital, St. Louis.

Wilbur H. Gearhart, M.D., 8711 St. Charles Rock Road, St. Louis 14, has become a member of the St. Louis County Medical Society. Dr. Gearhart is a native of Pennsylvania, received his preliminary education in Indiana, and his M.D. degree from Hahnemann Medical College in 1954.

William I. Goettman, M.D., 1323 McCutcheon, St. Louis 17, has become a member of the St.

Louis Medical Society. Dr. Goettman is a native of Minnesota, received his preliminary education in Ohio, and his M.D. degree from Washington University School of Medicine in 1958. He is serving a residency at Barnes Hospital, St. Louis.

David G. Hall, M.D., University of Missouri Medical Center, Columbia, has become a member of the Boone County Medical Society. Dr. Hall is a native of Arkansas, received his preliminary education in Virginia, and his M.D. degree from the University of Virginia School of Medicine in 1953.

John A. Headrick, M.D., 5615 Waterman Ave., St. Louis 12, has become a member of the St. Louis Medical Society. Dr. Headrick is a native of Missouri, received his preliminary education in Missouri and his M.D. degree from Washington University School of Medicine in 1958. He interned and is serving a residency at St. Luke's Hospital, St. Louis.

Ronald E. Hoffmann, M.D., 8519 General Grant Lane, St. Louis 23, has become a member of the St. Louis Medical Society. Dr. Hoffmann is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1953. He interned at St. Louis County Hospital and served a residency at St. Mary's Hospital, Clayton.

Frank E. Hunleth, M.D., 7162 Jamieson Ave., St. Louis 9, has become a member of the St. Louis Medical Society. Dr. Hunleth is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1957. He interned at St. Luke's Hospital, St. Louis and is serving a residency at Firmin Desloge Hospital, St. Louis.

Robert M. Jamison, M.D., University of Missouri Medical Center, Columbia, bas become a member of the Boone County Medical Society. Dr. Jamison is a native of Virginia. He received his M.D. degree from the University of Virginia School of Medicine in 1950.

Roy E. Kenney, M.D., 113 Hickory Street, Neosho, has become a member of the Ozarks Medical Society. Dr. Kenney is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1957. He interned and served a residency at St. Luke's Hospital, St. Louis.

John H. Landor, M.D., 807 Stadium Road, Columbia, has become a member of the Boone County Medical Society. Dr. Landor is a native of Ohio, received his preliminary education in Illinois and his M.D. degree from the University of Chicago in 1953.

Carleton H. Lee, M.D., 2403 Frederick Ave., St. Joseph, has become a member of the Buchanan County Medical Society. Dr. Lee is a native of Kansas, received his preliminary education in Kansas, and his M.D. degree from the University of Kansas in 1939.

Gerald B. Lee, M.D., 5525 Enright Ave., St. Louis 12, has become a member of the St. Louis Medical Society. Dr. Lee is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from the University of Missouri in 1958.

Charles L. Long, Jr., M.D., 7224 Dorset Ave., St. Louis 30, has become a member of the St. Louis Medical Society. Dr. Long is a native of Missouri, received his preliminary education in Massachusetts, and his M.D. degree from St. Louis University School of Medicine in 1959. He is interning at St. John's Hospital, St. Louis.

Herbert K. Luke, M.D., 819 Locust Street, St. Louis 1, has became a member of the St. Louis County Medical Society. Dr. Luke is a native of Hawaii, received his preliminary education in Hawaii, and his M.D. degree from St. Louis University School of Medicine in 1954.

John E. McGee, M.D., 1732 Red Bird Cove, St. Louis 17, has become a member of the St. Louis Medical Society. Dr. McGee is a native of Illinois, received his preliminary education in Illinois, and his M.D. degree from St. Louis University School of Medicine in 1953. He interned at Ancker Hospital, St. Paul, Minnesota and is serving a residency at St. Louis University Hospitals.

James E. McKittrick, M.D., 6636 Pershing Ave., St. Louis 30, has become a member of the St. Louis Medical Society. Dr. McKittrick is a native of Massachuesetts, received his preliminary education in Massachusetts, and his M.D. degree from Havard Medical School in 1953. He interned and is serving a residency at Barnes Hospital, St. Louis.

Richard M. Margolis, M.D., 390 W. St. Anthony, Florissant, has become a member of the St. Louis County Medical Society. Dr. Margolis is a native of New York, received his preliminary education in Virginia, and his M.D. degree from Western Reserve University in 1951.

Alexander R. Margulis, M.D., 1209 Santa Fe Drive, St. Louis 19, has become a member of the St. Louis Medical Society. Dr. Margulis is a native of Yugoslavia, received his preliminary education in Yugoslavia, and his M.D. degree from Harvard Medical School in 1950. He interned at Henry Ford Hospital, Detroit, Michigan.

E. K. Musson, M.D., 123 N. Allen, Macon, has become a member of the Chariton-Macon-Monroe-Randolph Medical Society. Dr. Musson is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from the University of Kansas School of Medicine in 1928.

Gunther P. Nagel, M.D., 7840 Greensfelder Lane, St. Louis 30, has become a member of the St. Louis County Medical Society. Dr. Nagel is a native of Minnesota, received his preliminary education in California, and his M.D. degree from Stanford University in 1953.

James A. Nishi, M.D., 5525 Enright, St. Louis 12, has become a member of the St. Louis Medical Society. Dr. Nishi is a native of Hawaii, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1957. He interned and is serving a residency at St. Luke's Hospital, St. Louis.

Melchorl Ongjoco, M.D., 16 Hampton Village Plaza, St. Louis 9, has become a member of the St. Louis Medical Society. Dr. Ongjoco is a native of Manila, received his preliminary education in Manila, and his M.D. degree from the University of Santo Tomas Faculty of Medicine and Surgery in 1946.

Brent M. Parker, M.D., 4960 Audubon, St. Louis 10, has become a member of the St. Louis County Medical Society. Dr. Parker is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1952.

Charles W. Pemberton, M.D., Mendon, has become a member of the Chariton-Macon-Monroe-Randolph County Medical Society. Dr. Pemberton is a native of Oklahoma, received his preliminary education in Missouri, and his M.D. degree from the University of Nebraska in 1934.

Edward M. Plowman, M.D., Grand & Lincoln, Hannibal, has become a member of the Marion-Ralls-Shelby County Medical Society. Dr. Plowman is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from the University of Pittsburgh in 1952.

Milo J. Spurgeon, M.D., 7340 Windsor, Prairie Village 15, Kansas, has become a member of the Boone County Medical Society. Dr. Spurgeon is a native of Kansas, received his preliminary education in Kansas, and his M.D. degree from the University of Kansas in 1955.

William I. Stryker, M.D., 9 Elm Ave., St. Louis 22, has become a member of the St. Louis Medical Society. Dr. Stryker is a native of Missouri, received his preliminary education in Indiana, and his M.D. degree from St. Louis University School of Medicine in 1953. He interned at St. Louis City Hospital.

Theodore von Ravenswaay, M.D., Ellis Fischel State Cancer Hospital, Columbia, has become a member of the Boone County Medical Society. Dr. von Ravenswaay is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1953.

William M. Walker, M.D., Professional Bldg., Springfield, has become a member of the Greene County Medical Society. Dr. Walker is a native of Missouri, received his preliminary education in Iowa, and his M.D. degree from the University of Iowa in 1955.

W. A. Williams, Jr., M.D., 24 N. Sprigg, Cape Girardeau, has become a member of the Cape Girardeau County Medical Society. Dr. Williams is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from the University of Tennessee in 1958.

Charles R. Willman, M.D., Kirkpatrick Bldg., St. Joseph, has become a member of the Buchanan County Medical Society. Dr. Willman is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University School of Medicine in 1954. He interned at St. Luke's Hospital, St. Louis, and served a residency at Henry Ford Hospital, Detroit, Michigan.

Kathleen Winters, M.D., 457 N. Kingshighway Blvd., St. Louis 8, has become a member of the St. Louis Medical Society. Dr. Winters is a native of South Carolina, received her preliminary education in South Carolina and her M.D. degree from the Medical College of South Carolina in 1955. She is serving a residency at St. Louis Children's Hospital.

MISSOURI ACADEMY OF GENERAL PRACTICE

(Continued from page 138)

bach, St. Louis; George Feist, Kansas City; Herbert Rudi, St. Louis; Albert Plag, St. Louis.

Membership Committee—P. C. Hall, 4243 Lafayette St., St. Louis, Chairman; John Walterscheid, Hannibal; W. D. English, Cardwell; Vern Michael, St. Louis; William Ganley, Kansas City; M. C. Gentry, Springfield; Owen W. Craig, St. Joseph.

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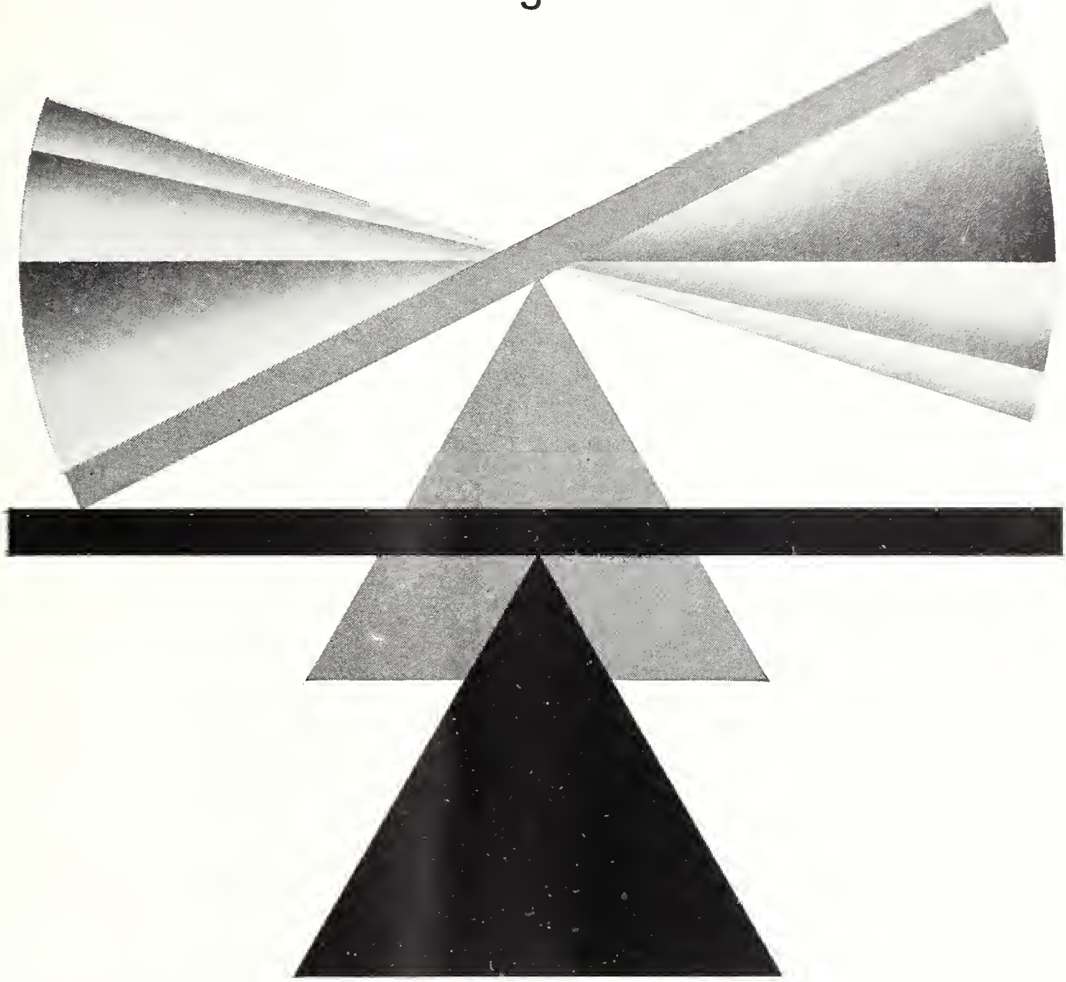

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1. Kuzell, W. C., and others.: Arch. Int. Med. 92:646, 1953. 2. Wolfson, W. Q.: J. Michigan M. Soc. 54:323, 1955. 3. Strandberg, B.: Brit. J. Phys. Med. 19:9, 1956. 4. Platt, W. D., Jr., and Steinberg, I. H.: New England J. Med. 256:823 (May 2) 1957.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Buchanan County Medical Society

New officers for 1960 were elected by the Buchanan County Medical Society at its dinner meeting, Wednesday night, December 2, Hotel Robidoux, St. Joseph.

Dr. J. M. Hughes was chosen President-Elect to serve as President in 1961. Dr. T. E. Potter will serve as President of the Society in 1960. Other officers elected were: Dr. John R. Forgrave, Vice-President; Dr. William V. Rost, reelected Secretary; Dr. Robert W. Kieber, reelected Treasurer; Dr. Manning E. Grimes, Board of Censors; Dr. Joseph Fisher, reelected Delegate to the Missouri State Medical Association; Drs. Jacob Kulowski and John N. Martin, Alternate Delegates; Dr. John T. Rogers, member, Committee on Public Policy; Dr. William Redmond, trustee; Dr. George W. Forman, retiring President, member of the Executive Committee. These newly elected officers and Dr. T. E. Potter, who will serve as President of the Society in 1960, will be installed December 9 at Hotel Robidoux at the annual dinner of the society.

William B. Rost, M.D., *Secretary*

Grand River County Medical Society

The Grand River County Medical Society and its Woman's Auxiliary held a Christmas dinner meeting at the Strand Hotel in Chillicothe on Thursday night, December 10. There were 52 present including members, wives and guests. Special guests for the occasion were Dr. and Mrs. Ralph Perry of Kansas City. Dr. Perry, President of the Missouri State Medical Association, addressed the group briefly.

Dr. Perry spoke briefly.

Following his address and other introductions, a special Christmas musical program was presented under the direction of Mrs. Ralph Bohnsack of Brookfield. The meeting room had been appropriately decorated in true Christmas fashion by members of the Auxiliary.

Mrs. Bohnsack, program chairman, made announcements.

The evening festivities began with a social hour followed by an appropriate dinner and then the program. The Society was most pleased to have Dr. and Mrs. Perry as honored guests on this special occasion. Mr. Ray McIntyre, Field Secretary of the State Medical Association, was also present.

Incoming president, Dr. Bohnsack, presents plaque to outgoing president, Dr. Allen.

B. D. Howell, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

J. J. WIMP, KIRKSVILLE, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The December dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held at the Woodland Hospital in Moberly on Thursday night, December 10.

The scientific program consisted of a panel discussion on advances in tissue culture technics of viruses and the virus diseases, presented by Clement E. Brooke, M.D., and Donald P. Durand, M.D., of the University of Missouri School of Medicine. E. K. Muson, M.D., of Macon, Health Officer for District 2 of the State Division of Health, and C. W. Pemberton, M.D., of Mendon, were elected to membership in the Society.

Members present were: Drs. G. C. Rice and D. D. Stuart, Brunswick; C. C. Weger, Keytesville; Gretchen Collins, D. E. Eggleston, H. S. Miller, Carl Rinker and E. K. Muson, Macon; F. A. Barnett, Paris; P. V. Dreyer, Huntsville; G. W. Hawkins and F. L. Harms, Salisbury; C. W. Pemberton, Mendon; and Josephine Baker, W. D. Chute, C. C. Cohrs, J. W. Fleming, Jr., T. S. Fleming, R. M. Hasson, L. E. Huber, A. P. Rowlette and C. C. Smith, Moberly. Dr. L. Lachance, Centralia, was a guest.

Josephine Baker, M.D., *Secretary*

Marion-Ralls-Shelby County Medical Society

A dinner meeting of the Marion-Ralls-Shelby County Medical Society was held at the Mark Twain Hotel in Hannibal on Tuesday night, December 15.

The scientific program was presented by Norman K. Muschany, M.D., St. Louis, who spoke on, "The Management of Emergency Obstetrical Problems." This was an interesting and informative discussion.

The evening activities began with a social hour, dinner and, then, the program.

John Walterscheid, M.D., Hannibal, and Wyeth Hamlin, M.D., Hannibal, were elected President and Secretary-Treasurer respectively of the Society for 1960.

John Walterscheid, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Lincoln-St. Charles County Medical Society

A holiday dinner meeting of the Lincoln-St. Charles County Medical Society and the doctors' wives was held Tuesday night, December 29 at the Southern Air in Wentzville.

Festivities began with a social hour, followed by dinner and then the business of the evening, that being the election of officers for 1960. Officers elected were: President, Dr. William Poggemeier, St. Charles; Vice President, Dr. V. A. Schneider, St. Charles; Secretary-Treasurer, Dr. Paul Rother, St. Charles.

There were some 20 people present to enjoy the evening festivities.

Paul Rother, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

BYRON M. STUART, BOONVILLE, COUNCILOR

Audrain County Medical Society

A dinner meeting of the Audrain, Callaway, and Montgomery County Medical Societies was held Wednesday night, December 2, at the Country Club in Mexico. The evening began with social refreshments, followed by dinner, and then a most interesting scientific discussion was presented by W. Stanley Hartroft, M.D., Mallinkrodt Professor and Chairman, Department of Pathology, Washington University School of Medicine, St. Louis.

Dr. Hartroft spoke on, "Recent Experiences Concerning Dietary Fat and Experimental Myocardial Infarction." This session was well attended and much interest was shown in this pertinent scientific presentation.

Ernest S. Gantt, M.D., Jr., *Secretary*

Boone County Medical Society

The annual election of officers for the Boone County Medical Society was held Tuesday night, December 1, at the Daniel Boone Hotel in Columbia. Dr. John J. Modlin was elected President and will serve during the year 1960. Other officers elected to serve with him are Dr. Joseph E. Flynn, Vice President, and Dr. E. L. Washington, Secretary-Treasurer.

The following three members were elected to the Board of Censors: Dr. G. H. Garrett, for a one year term; Hugh E. Stephenson, Jr., for a two year term; and Dr. LeRoy Miller for a three year term.

Delegates elected to serve at the 102nd annual session of the Missouri State Medical Association in St. Louis, March 13-16, are Drs. M. Pinson Neal and James Cope; Tom Burns and Joseph E. Flynn, alternates.

Two new members were elected to membership in the Society, namely: Theodore Van Ravenswaay and Milo J. Spurgeon. Dr. Van Ravenswaay is a pathologist at Ellis Fischel State Cancer Hospital. Dr. Spurgeon is an anesthesiologist.

JOSEPH E. FLYNN, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

West Central Missouri Medical Society

The West Central Missouri Medical Society and the doctors' wives held a Christmas dinner meeting at the Country Club in Nevada on Thursday night, December 17. This was truly a meeting where the "Spirit of Christmas" was the goal sought.

The speaker of the evening was the main contributor in this search. He was the Rev. Pliney Elliott, Pastor of the First Christian Church, in Nevada. In addition to his fine theological qualifications and accomplishments, Rev. Elliott served as Chaplain with the Combat Engineers in the European Theatre during World War II.

We believe that the members and their wives at this particular meeting enjoyed a most worthwhile program and evening of sociability.

JACK MOODY, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Greene County Medical Society

The Annual Business Meeting of the Greene County Medical Society and the Greene County Medical Society Foundation was held Friday, December 18, at the Kentwood Arms Hotel, with 38 members and two guests present.

The President, Dr. J. G. Siceluff, presided. Upon motion by Dr. Harry Silsby, seconded by Dr. T. E. Ashley, the minutes of the November 27, 1959, meeting were approved as published in the *Bulletin*.

The President declared the annual election of officers to be in order and emphasized that as provided by the By-Laws of the Greene County Medical Society Foundation, all officers elected for the Greene County Medical Society will serve both organizations.

The following officers were then duly elected: For President-Elect, Dr. John P. Ferguson; Secretary, Dr. F. T. H'Doubler, Jr.; Treasurer, Dr. William F. Johnson; for two three-year terms on the Council, Drs. F. T. Moseley and Stanley S. Peterson; for a one-year term on the Council to complete the unexpired term of Dr. James T. Good, Dr. E. J. Schwartz; for a one two-year term on the Council to complete the unexpired term of Dr. John P. Ferguson, Dr. G. Bruce Lemmon, Jr. For Delegates to the Missouri State Medical Association, Drs. John P. Ferguson, Kenneth Knabb and Stanley S. Peterson. For Alternate Delegates to the Missouri State Medical Association, Drs. Don Gose, Arch Lowe, Jr., and F. T. H'Doubler, Jr. For members at large to serve with Drs. Schwartz, Elkins and Siceluff on the Nominating Committee for 1960, Drs. Thomas Ashley, E. M. Powell and G. Bruce Lemmon, Jr.

The election of officers being declared duly completed, the President asked the new officers of the Society to stand for recognition. Upon motion by Dr. Ivy, seconded by Dr. Williams, the By-Laws were waived so that the January Installation Banquet may be held the fifth Friday of January, January 29, due to reservation difficulties, and the February meeting held at such time as the President, Dr. Walter W. Tillman, Jr., shall select, to permit a joint meeting with the 8th Councilor District at Mount Vernon, Missouri.

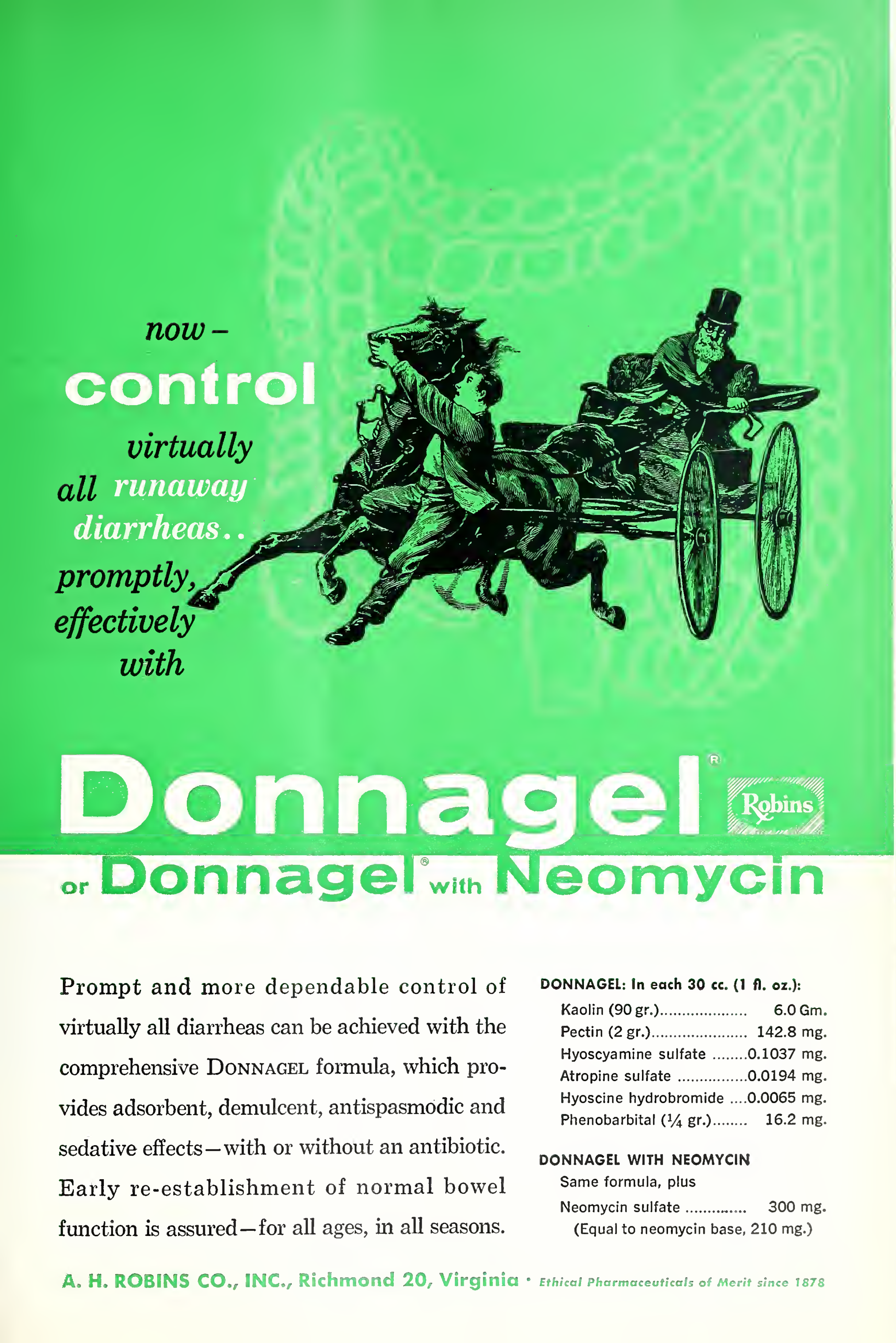
In the absence of Dr. Walter W. Tillman, Jr., Councilor for the 8th District of the Missouri State Medical Association, Mr. Buckner reported briefly on the December 12-13, 1959, meeting of the Council of the State Medical Association.

The President announced that in order to preserve time at this meeting, all Committee reports were accepted by title and will be published in the January *Bulletin* for information to the membership.

The annual reports of officers was then called for and Dr. Paul C. Morton presented the annual report of the Treasurer, followed by Dr. G. Bruce Lemmon, Jr. with the annual report of the Secretary. Upon motion by Dr. James T. Brown, seconded by Dr. Lockhart, Drs. Morton and Lemmon were given a vote of thanks for their service in these offices.

There followed the annual report of the President presented by Dr. Joseph G. Siceluff. Following Dr. Siceluff's presentation, a rising vote of appreciation was given to him by those present. There being no further business, the meeting was declared adjourned.

G. BRUCE LEMMON, JR., M.D., *Secretary*



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Jasper County Medical Society

A regular meeting of the Jasper County Medical Society was held at Mickey Mantle's Holiday Inn in Joplin on Tuesday night, December 8. The meeting was called to order by the President, Irwin T. Craig. Forty-five members were present. Due to the lateness of the hour and upon motion duly made and carried, a reading of the minutes of the previous meeting was waived.

Guests introduced were: Drs. Wiley Chestnut; J. George DeTar, Sr., of Miami, Oklahoma; and Judge Vern E. Thompson of Joplin. There being no further business, the meeting was turned over to Dr. George F. DeTar of Joplin who introduced the speaker, James Growdon, Professor and Head of the Department of Surgery of the University of Arkansas School of Medicine, Little Rock, Arkansas. Dr. Growdon discussed the diagnosis and management of specific hernia problems of the esophagus. A good question and answer period followed the lecture. Dr. Growdon is a native of Joplin. Both his father and grandfather were practicing physicians in the Joplin area and his brother, Dr. John Growdon, is a prominent surgeon in Kansas City.

David Allen, M.D., *Secretary*

Ozarks Medical Society

The Ozarks Medical Society met at the Missouri State Sanatorium for dinner on December 8, at 7:00 p.m. There were 44 members and guests present. The scientific program was presented by Dr. W. R. Langston of Springfield, his subject being "Retro-Peritoneal Tumors," which was well received.

The business meeting that followed consisted of election of the following officers: Dr. Henry Sweany of the Missouri State Sanatorium was elected President; Dr. J. D. Bennett, Branson, Vice President; Dr. A. J. Graves, Mount Vernon, Secretary-Treasurer, and Dr. F. B. Brown, Aurora, Assistant Secretary. Delegates elected to the forthcoming meeting of the Missouri State Medical Association are as follows: Barry County, William J. Glass, Alternate, R. R. Donley; Christian County, S. D. Roper; Lawrence County, Kenneth Glover, Alternate, A. J. C. McCallum; Stone County, Fred Wommack, Alternate, A. P. Capetti; Taney County, J. M. Threadgill, Alternate, J. D. Bennett; Newton County, M. C. Bowman, Alternate, George Blankenship; McDonald County, J. J. Royce.

The report on the skin testing program in Newton County was received by the Society. All the elementary pupils of Newton County have been skin tested. Further reports will be rendered at a later date.

A. J. Graves, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Mid Missouri County Medical Society

Thirty physicians and their wives attended the Mid Missouri Medical Society annual Christmas party and election of officers at the Pine Room, Greyhound Bus Station, in Rolla on Thursday night, December 17. An enjoyable social hour preceded the dinner and program.

Hugh Stephenson, Jr., M.D., Chairman, Department of Surgery, University of Missouri School of Medicine, Columbia, gave an interesting discussion on "Some Recent Advances in

Dr. Stephenson presented the scientific talk.

The group paused for a photograph.

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Surgery." He showed films of special surgical operations recently done at the medical center. This was a well received program.

A short business session was held to receive the report of the Nominating Committee, and officers for the new year were elected as follows: President, A. R. Baumann, Steeleville; Vice Presidents, R. W. Froelich, Lebanon; E. A. Stricker, St. James; F. A. Elders, Cuba; B. J. Bass, Salem; C. S. Miller, Waynesville; Secretary-Treasurer, M. K. Underwood, Rolla.

A number of members of the Fort Leonard Wood Clinical Society were welcome guests. Plans are for the next meeting of the Society to be held at Fort Leonard Wood by invitation of the Fort Clinical Society.

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN N. BULL, IRONTON, COUNCILOR

Mineral Area County Medical Society

The Mineral Area County Medical Society held a business meeting on Thursday night, December 17, at the State Hospital in Farmington.

Among other business matters discussed at this session, the question of revising and bringing up-to-date a constitution and by-laws for the Society was considered. The Secretary was requested to secure additional information on model constitutions, and by-laws for county medical societies comparable to the Mineral Area Society.

Because of adverse weather conditions, the scientific program was postponed to a later meeting.

George L. Watkins, M.D., *Secretary*

NATIONAL ASSOCIATION OF BLUE SHIELD PLANS REPORTS

More than 1,600,000 persons enrolled in the 73 Blue Shield Plans located in North America during the first nine months of 1959, and during the same period Blue Shield paid out over $487,500,000 for medical-surgical care rendered to members, the National Association of Blue Shield Plans reported.

"Of significance is the fact that the nine month enrollment gain for 1959 reflected a substantial improvement over the 244,673 gain for the corresponding nine months of 1958," the national association stated in its report. Total membership in the various Blue Shield Plans reached 44,214,441 as of September 30, 1959, which represents an enrollment of nearly 24 per cent of the total United States population.

Total payments to doctors in behalf of members, which exceeded 480 million dollars during the nine month period ending September 30, represented 90 per cent of the total income of all Plans. Meanwhile, the Plans expended just under 10 per cent of total income for administrative expenses.

"Both the nine month financial and enrollment reports," the national association reported, "bear out the vital part Blue Shield plays in the health care of the nation. The enrollment gain reflects the continued acceptance on the part of the public for the medical-surgical programs offered by Blue Shield Plans, and the benefits provided represent an all time high for a nine month period and serves to point up the extent to which Blue Shield is helping pay the nation's yearly doctor bills."

RAMBLINGS OF THE FIELD SECRETARY

(Continued from page 168)

ity injuries should be carried from the field. For all injuries, the importance of prompt, definitive diagnosis and treatment cannot be over emphasized."

The following report was given from experiments carried on in the use of so-called "pep pills": Six groups of experiments were carried out on trained swimmers, runners and weight throwers to determine whether amphetamine sulfate improves the measured performance of such athletes. In addition to amphetamine, placebos and secobarbital sodium were used as controls. The subjects also gave information regarding their subjective feelings and completed questionnaires designed to help them evaluate their performances. Amphetamine significantly improved athletic performance in trained athletes at the top of their form. Secobarbital produced significant distortion in judgment of the success of the performance, greater distortion of judgment than was produced by the amphetamine.

Included in the attendance at these sessions were physicians, athletic coaches, physical therapists, athletes and other sports enthusiasts.

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MISSOURI STATE MEDICAL ASSOCIATION

102nd Annual Session

Sheraton-Jefferson Hotel, St. Louis
March 13, 14, 15, 16, 1960

TIME AND PLACE OF MEETINGS

Sunday, March 13

12:30 p.m. Registration for House of Delegates, Mezzanine Floor.
1:30 p.m. House of Delegates, Crystal Room.
3:30 p.m. Reference Committee Meetings, Crystal Room, Rooms 2, 3, 6 and 8.
6:30 p.m. Buffet Supper and Entertainment, Woman's Auxiliary, Boulevard Room.

Monday, March 14

8:00 a.m. Registration, Mezzanine Floor.
9:00 a.m. Refresher Courses, Crystal Room, Rooms 2, 3, 7 and 8.
10:00 a.m. Intermission to View Exhibits, Mezzanine Floor.
10:30 a.m. Scientific Session, Crystal Room.
12:00 noon Committee on Maternal Welfare Luncheon. Room 9.
2:00 p.m. Scientific Session, Crystal Room.
3:00 p.m. Intermission to View Exhibits, Mezzanine Floor.
3:30 p.m. Panel: Medical Insurance, Crystal Room.
4:30 p.m. House of Delegates, Crystal Room.
5:15 p.m. Reference Committee Meetings, Crystal Room, Rooms 2, 3, 6 and 7.
6:00 p.m. Dinner Meeting, St. Louis and Kansas City Gynecological Societies, Mayfair Hotel.
6:30 p.m. Dinner Meeting, Committee on Diabetes.
6:30 p.m. Dinner Meeting, Missouri Surgical Society.

Tuesday, March 15

8:00 a.m. Registration, Mezzanine Floor.
9:30 a.m. Scientific Session, Crystal Room.
10:30 a.m. Intermission to View Exhibits, Mezzanine Floor.
11:00 a.m. Scientific Session, Crystal Room.
12:00 noon University of Missouri Medical Alumni, Luncheon, Gold Room.
2:00 p.m. Scientific Session, Crystal Room.
3:00 p.m. Intermission to View Exhibits.
3:30 p.m. Clinical Pathologic Conference, Crystal Room.
7:30 p.m. Annual Banquet in Honor of Past Presidents.

Wednesday, March 16

9:00 a.m. Scientific Sessions, Crystal Room and Room 3.
10:30 a.m. Intermission to View Exhibits, Mezzanine Floor.
11:00 a.m. Scientific Session, Crystal Room.
1:30 p.m. House of Delegates, Crystal Room.

PROGRAM

Sunday, March 13, 1960

1:30 p.m. House of Delegates. Crystal Room.
3:30 p.m. Reference Committee meetings. Rooms 2, 3, 6, 8, Crystal.

Monday, March 14, 1960

9:00 a.m. Refresher Courses:
Fluid Balance, C. Thorpe Ray, M.D., Columbia. Room 2.
Common Dermatological Problems, Richard L. Sutton, M.D., Kansas City. Room 3.
Rheumatic Arthritis, Paul Hagemann, M.D., St. Louis. Room 7.

A brief presentation regarding diagnostic criteria separating this entity from other collagen diseases will be given. Newer related laboratory tests will be discussed giving them their proper emphasis and interpretation. Finally, the high lights of current therapy will be presented, just how much steroid should be used, when to use antimalarial drugs, and such questions will be answered.

Management of Common Obstetric Problems, J. S. Roden, M.D., Columbia. Crystal Room.

Rectal Bleeding, Francis J. Burns, M.D., St. Louis. Room 8.

Bleeding from the rectum is a rather common sign and, in every case, should be investigated. A precise clinical history is important and a thorough examination of the anal canal, rectum and colon should be made. The common causes of bleeding will be mentioned as well as their methods of diagnosis.

10:00 a.m. Intermission to View Exhibits.

10:30 a.m. Newer Concepts in Therapy of Diabetes, Franklin B. Peck, M.D., Indianapolis, Ind.

It is now being established that other systems besides carbohydrate are involved in the clinical syndrome diabetes, particularly protein synthesis and lipid metabolism. Modern therapy has been based on compensating the diabetic imbalance brought about by extra demands on the insulogenic mechanism by means of Insulin artificially introduced into the system or reducing the stress load by dietary restriction. The recent introduction of oral hypoglycemic agents has introduced special problems which are not yet resolved. The diet is every bit at important a part of treatment as the prescription of Insulin or oral tablets but this keystone of therapy is being sadly neglected.

Today most clinicians aim as closely as possible toward the establishment of normal blood chemistry and freedom from glycosuria, but accept partial fulfillment of these objectives. Such a compromise usually permits glycosuria in one period after a meal, a blood sugar higher than normal on one post-prandial period, normal cholesterol values, absence of urinary ketones and normal activity, weight and growth without hypoglycemic reactions.

The place of oral agents in therapy will be considered along with a discussion of the clinical principles involved in the use of the several varieties of modified Insulin preparations in relation to their differences in time action.

Sponsored by the Missouri Diabetes Association.

11:15 a.m. The Early Diagnosis and Treatment of Fat Embolism, Garrett F. Pipkin, M.D., Kansas City.

In 1936 Koritschorner and Sophian published in the *Journal of the Missouri Medical Association* their falling hemoglobin test for the early diagnosis of fat embolism enabling physicians to diagnose the syndrome before the antimortem stage, and at a time soon enough to provide life saving treatment. Most unfortunately this test has never reached the major textbooks on trauma, and has remained buried—save for word of mouth survival by a few disciples in Kansas City. Time and further research have not only substantiated their observations, but have added to the armamentarium of their suggestions for treatment.

Fat embolism is a morbid process, some phases of which should be assumed to be present after all moderate and severe injuries, and after bone operations. In most cases nature provides a margin of safety of from forty-eight to seventy-two hours until critical symptoms develop. It is in this period that much can be done. An otherwise unexplained rapid fall in hemoglobin value should be assumed to be due to fat embolism. The physician is then faced with a treatment race against time, since the condition is usually fatal before the sixth day or else reverses itself.

In reporting the results of any method of treatment of fat embolism the probability of spontaneous recovery arises in any single case. All that one can say is that some of our cases which should have died—survived. Since instituting the diagnostic and therapeutic methods presented in this paper in 1954, no case of fat embolism has been posted on our service.

11:30 a.m. Nervousness and Pheochromocytoma, Warren F. Wilhelm, M.D., Kansas City.

A brief review of the literature and background of clinical and laboratory tests for detection of pheochromocytoma with presentation of case history of a patient with five to six year history of repeated attacks of "nervousness" with studies indicating pheochromocytoma will be presented. The patient was examined and tumor removed with complete relief of symptoms and previously noted paroxymal attacks.

11:45 a.m. Hyaline Membrane Disease, Prophylaxis and Treatment, Daniel B. Landau, M.D., Hannibal.

Some of the theories regarding the pathogenesis and some case reports which illustrate this theory and the method used in treatment will be presented.

Guides for treatment include: maternal history during pregnancy; birth history; course that infant runs during the first few hours and the first few days when indicated, including physical findings; venous pressures; blood counts; x-rays.

12:00 noon Committee on Maternal Welfare Luncheon Meeting. Room 9.

2:00 p.m. Surgery of the Common Bile Duct, George A. Hallenbeck, M.D., Rochester, Minn.
Sponsored by the Missouri Surgical Society.

2:30 p.m. Estimation and Measurement of Blood Loss at Delivery, Michael Newton, M.D., Jackson, Miss.
Sponsored by the St. Louis Gynecological Society.

3:00 p.m. Intermission to View Exhibits.

3:30 p.m. Panel: Medical Insurance, To Whom Does the Fee Belong?
Moderator: A. P. Rowlette, M.D., Moberly.
Panelists:
L. V. Mulligan, M.D., St. Louis.
Carl Moyer, M.D., St. Louis.
R. O. Muether, M.D., St. Louis
A. E. Spelman, M.D., Smithville.

4:30 p.m. House of Delegates. Crystal Room.
Reference Committee Meetings. Rooms 2, 3, 6, 7.

Tuesday, March 15, 1960

9:30 a.m. Panel: Peripheral Vascular Disease.
Moderator: Ormand C. Julian, M.D., Chicago.
Panelists:
Nelson W. Barker, M.D., Rochester, Minn.
Theodore E. Keats, M.D., Columbia.
C. Rollins Hanlon, M.D., St. Louis.

10:30 a.m. Intermission to View Exhibits.

11:00 a.m. Pulmonary Emphysema, Hurley L. Motley, M.D., Los Angeles, Calif.

Pulmonary emphysema is the most common chronic lung disease encountered today and the incidence appears to be increasing. Factors related to etiology will be discussed inasfar as known. Although more common in men, emphysema is now being recognized with increasing frequency in women.

The early diagnosis of emphysema by the usual clinical means is often difficult and frequently missed. Even in severe emphysema, the chest roentgenogram may be misleading in some cases, and the reverse situation occurs. Pulmonary function tests are well suited to evaluate the extent and severity of emphysema in the individual case. No single test of function has been found satisfactory, rather a battery of physiologic tests are required for accurate diagnosis and evaluation in the individual patient. Function tests are helpful for surgical or medical management or assessing disability status. The emphysema patient has difficulty in getting air down to the alveolar level adequately, there is impairment in the transfer of oxygen and carbon dioxide between the alveoli and the blood and the pulmonary circulation lacks expansibility. Unrecognized respiratory acidosis is a frequent cause of death in severe emphysema, precipitated often by the administration of one of the opiate or barbiturate group of drugs and/or oxygen, and there are no postmortem findings to make the diagnosis. Newer forms of treatment in the management of emphysema will be discussed.

Question Period. Moderator: Paul Murphy, M.D., St. Louis.

12:00 noon University of Missouri Medical Alumni Luncheon. Gold Room.

2:00 p.m. Indications for Open Heart Surgery in Adults, Ormand C. Julian, M.D., Chicago.

2:30 p.m. Management of Children With Diabetes Mellitus, Robert L. Jackson, M.D., Columbia.

Diabetes in children during the pre-insulin era was a severe and rapidly progressive disease. Advances in the field of nutrition, introduction of prolonged-acting insulin preparations, and the discovery of antibacterial agents with which to combat intercurrent infections are all important factors which have combined to make it possible to attain and maintain control of the disease.

The juvenile type of diabetes is so different from diabetes in the middle aged or elderly patient that it requires special consideration. Present knowledge makes is possible to attain a high degree of control if the diabetic child is given adequate treatment early. It also is practicable to maintain good control for the child if he lives in a well adjusted home. It is important that the parents and child be carefully instructed and encouraged to become self-reliant. Until more knowledge of the disease is available, good control offers the best means of delaying or of averting degenerative changes.

An optimistic rather than a pessimistic outlook is warranted. There is reason to hope that soon practical methods to detect pre-diabetic patients may be had, and means to prevent the development of overt forms of the disease. Studies of this nature are in progress at the University of Missouri Medical Center. There also is reason to hope that more specific means of preventing vascular degeneration may be found.

The use of oral hypoglycemic drugs will be discussed briefly.

2:45 p.m. Recent Advances in Arthritis, Jack Zuckner, M.D., St. Louis.

Several new steroids have been introduced in the last few years for systemic and local therapy in various rheumatic diseases. Dexamethasone, the latest of the anti-inflammatory steroids recommended for treatment of rheumatoid arthritis, has been under intensive study at St. Louis University School of Medicine and results of long term oral therapy in 54 patients will be described. Similar studies with triamcinolone administered to 50 patients with rheumatoid arthritis will also be reported. In general, these newer hormones offered no significant advantages over some of the older preparations. There has also been no apparent superiority of any of the several derivatives of hydrocortisone, prednisolone and related compounds recently made available for intraarticular administration.

The various agglutination tests used as diagnostic aids will also be briefly discussed.

3:00 p.m. Intermission to View Exhibits.

3:30 p.m. Clinical Pathologic Conference.
Moderator: Carl V. Moore, M.D., St. Louis.
Case Presentation: Hollis N. Allen, M.D., St. Louis.
Discussants:
Don C. Weir, M.D., St. Louis.
Hugh E. Stephenson, Jr., M.D., Columbia.
Maxwell G. Berry, M.D., Kansas City.

Case Presentation

This 64 year old male was seen about August 25, 1957, by a physician because of a blocked nose. He had a heavy crust in the left side of his nose. Treatment was unsatisfactory and he was referred to an ear, nose and throat specialist.

Ear, Nose and Throat Examination.—There was a complete upper and lower denture. The pharynx was normal. The nasal septum was deflected to the right anterior. The right side of the nose was clear. On the left side of the nose, there was an infiltration of the upper lateral cartilage and ulceration of the septum. Wiping the area produced bleeding. There were a few small palpable glands in the neck—more on the right side than on the left.

He was scheduled to enter the hospital on Nov. 11, 1957, for a biopsy. Under local anesthesia, tissue was removed from the septum and ala. Clinical diagnosis was carcinoma. Although adequate local anesthesia was used, the patient complained of pain throughout the entire procedure.

Laboratory Data.—On Nov. 11, 1957, hematocrit was 35; red blood count was 4,100,000; white blood count was 9,300; nonprotein nitrogen was 36 mgs. per cent. Urine had a specific gravity of 1.016, was acid, had a few white blood cells, occasional red blood cell and occasional cast. VDRL was reactive. Sputum was negative for acid-fast bacilli.

Chest X-ray.—There was consolidation in the upper part of the left lung extending up and slightly back of the hilum with questionable cavitation in the center, suggesting inflammatory process or possibly neoplasm.

Tissue Examination.—A. Ala biopsy. B. Septum biopsy.

Gross Pathology.—Specimen A., a biopsy from the ala, consists of two small pieces of tissue, the largest measuring 4 by 3 by 2 mm. Specimen B consists of one large piece 12 by 5 by 3 mm. and several smaller pieces of tissue, said to be biopsy from the septum.

Microscopic Examination.—A. The smaller piece of tissue consists of inflammatory granulation tissue containing moderate numbers of multinucleated giant cells and partly covered by stratified squamous epithelium. The largest piece of tissue consists of skin which is partly ulcerated and the floor of the ulcer is formed by a thick layer of chronic inflammatory granulation tissue.

B. The tissue consists of florid granulation tissue consisting of a network of small blood vessels and closely packed plasma cell, histiocytes, lymphocytes, eosinophils and neutrophils. There is moderate swelling and proliferation of the endothelium lining the small vessels. In some areas there are large numbers of multinucleated histiocytic giant cells. The tissue is partly covered with stratified squamous epithelium. There are areas of pseudo-epitheliomatous hyperplasia, but no evidence of squamous cell carcinoma. Foreign body was searched for but not demonstrated.

Diagnosis.—Granuloma, etiology undetermined.

Comment.—The VDRL was positive and Wasserman pending. A therapeutic trial of penicillin (full course of penicillin) was recommended, regardless of the results of the Wasserman test. If antibiotic therapy should fail, then surgical removal of all of the lesion was recommended (if feasible). Foreign body had not been ruled out. If the lesion should progress inexorably in spite of all treatment, than idiopathic ("lethal") midline facial granuloma would have to be considered.

Because of reactive VDRL, history of syphilis was investigated and a rather indefinite history of previous syphilis with treatment was obtained. Details of treatment were vague. Blood tests made previous to entry into the hospital had been negative. He now gave the information that he had had a biopsy of the throat some six years ago but the report could not be traced. At that time, he was given 12 million units of penicillin.

On Nov. 24, 1957, he still had some bleeding at the nose but it looked cleaner and was less tender.

On November 26, 1957, nose appeared better and was definitely less tender.

On Dec. 6, 1957, nose appeared to be healing in good shape. He complained of considerable pain in his points since he had been getting penicillin.

On Dec. 18, 1957, the patient was brought to the hospital in an ambulance. For the last ten days he had been unable to report at the doctor's office due to headaches, depression and weakness. He had been in bed most of the time. He had been bleeding from the nose and had coughed up blood. He had had difficulty in breathing and had had 20 pounds weight loss. At that time he was referred to an internist. He had had no bowel movement for a week. He had no urinary complaints or hematuria.

Physical Examination.—The patient was conscious, irritated and appeared dehydrated. Conjunctiva was injected, there was no icterus and pupils reacted in a normal manner. There was crusted blood in both nostrils and in naso and hypopharynx. Chest showed no gross pathology to physical examination. Heart showed no abnormal findings. Abdomen was tender all over with a questionable mass in the right lower quadrant. The liver area was tender.

Laboratory Data.—On admission the nonprotein nitrogen was 232 mg. per cent; sugar was 139 mg. per cent; creatinine 12.8 mg. per cent; alkaline phosphatase 1.9 mm. units; bilirubin was 0.25 mg. per cent. Urine had a specific gravity of 1.000; albumin 0; glucose 0; microscopic examination gave negative findings. Blood showed a hematocrit of 30; Hgb. 9.0 gms.; white blood count was 12,600; bands 6 per cent; segments 75 per cent; eosinophils 1 per cent; lymphocytes 18 per cent.

Follow-up Laboratory Data.—Nonprotein nitrogen was 240 mg. per cent on Dec. 20, and 304 mg. per cent on Dec. 22. CO_2 was 18 mEq/1; chlorides 96 mEq/1; sodium 133 mEq/1; potassium 8.8 mEq/1; total protein 5.9 gms.; albumin 3.2 grams per cent and globulin 2.7 gms. per cent. Prothrombin time was 46 per cent.

Chest X-ray.—Reexamination of the chest showed irregular area of consolidation in the upper part of the left lung extending up and slightly back from the hilar area. This had shown no clearing since the previous examination and actually there might be slightly more involvement. Some of the additional involvement might represent segmental atelectasis of the adjoining lung. The markings were heavy in the lower lungs but otherwise the lungs were essentially clear. Although this could still represent an inflammatory process it was felt to be quite suspicious of neoplasm.

Course in Hospital.—Attempts were made to correct electrolyte imbalance.

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when self-medication has delayed medical attention...

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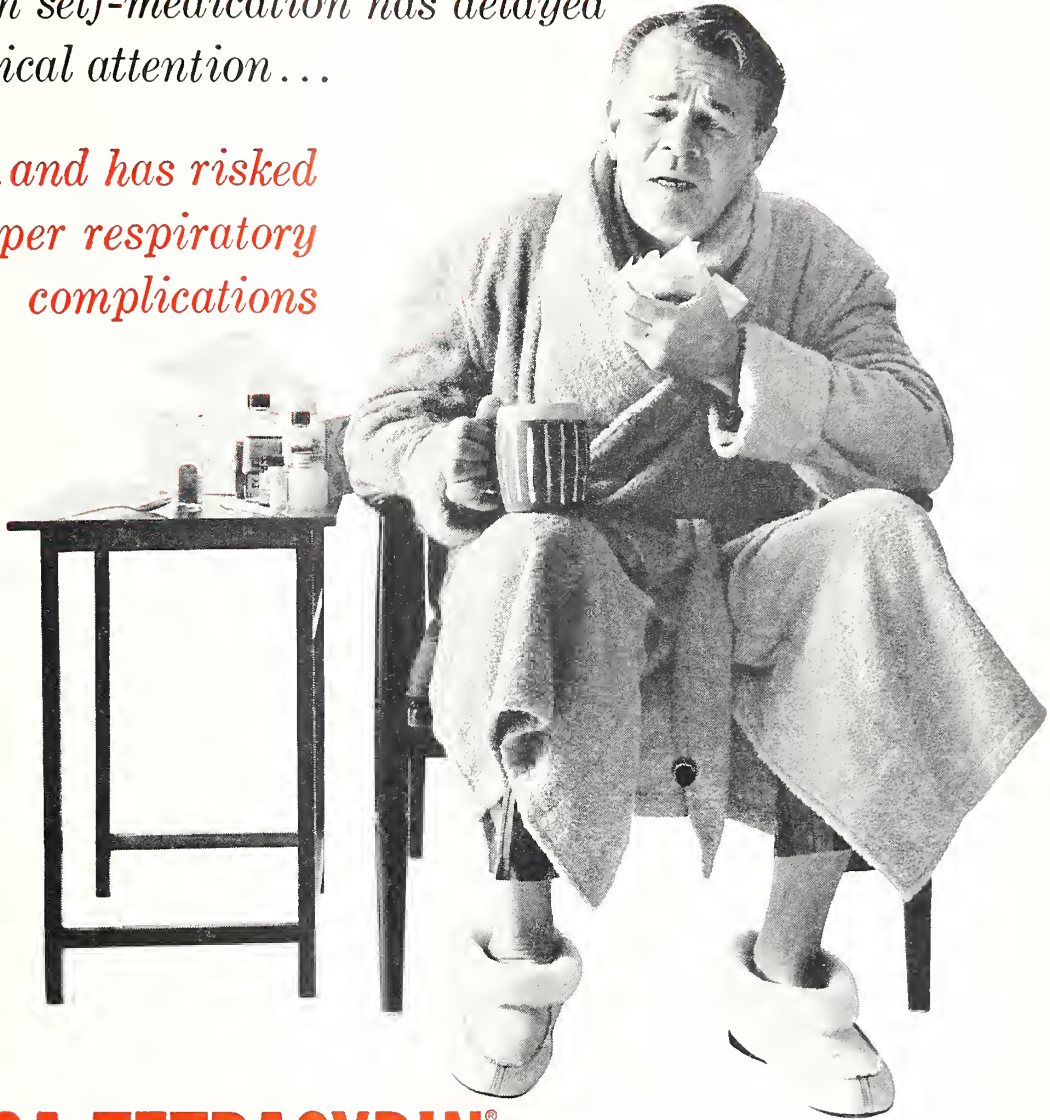

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Cosa-Tetracyn® — analgesic — antihistamine compound

act quickly to

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each capsule contains:

Cosa-Tetracyn	125 mg.
phenacetin	120 mg.
caffeine	30 mg.
salicylamide	150 mg.
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average adult dose: 2 capsules q. i. d.

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The patient was catheterized and indwelling catheter was left in place, but daily output average only about 200 cc. of bloody urine. There was also nasal bleeding and bloody stools.

The patient became comatose and expired at 12:25 p.m. on Dec. 22, 1957.

7:30 p.m. Annual Banquet in Honor of Past Presidents.
Speaker: Representative Bruce Alger, 5th District, Texas.

Wednesday, March 16, 1960

9:00 a.m. Seminar: Accidents in Children.
Moderator: Neal Middelkamp, M.D., St. Louis.

Burns, Frank S. McDowell, M.D., St. Louis.

A short discussion will be given of the causes and treatment of burns in children. Different types of treatment will be considered with some discussion of the advantages and disadvantages of each.

Head Injuries, Frank A. Palazzo, M.D., St. Louis.

Points of practical importance in the care of infants and children with head injuries are presented.

Special emphasis is placed on the immediate measures necessary and those which apply during the danger period of a few hours or days following the injury.

Precautions against some frequent pitfalls in evaluating the severity and exact nature of the head injury sustained are described. Birth injuries, subdural and extradural hematomata are also considered.

Poisonings, A. Roger Sharp, M.D., St. Louis.

Emphasis will be placed on poisonings occurring in and around the home, particularly as they are seen in children. In recent years intoxication caused by many of the newer widely used drugs has become a problem in children. Because of the bizarre clinical picture with which these patients present, an attempt will be made to cover briefly this latter problem as well.

Fractures, Warren Stamp, M.D., St. Louis.

9:00 a.m. Symposium: Modern Concepts of Treatment of Arteriosclerotic Heart Disease.
Anticoagulant Therapy, Benjamin Manchester, M.D., Washington, D.C.

The advantages and limitations of anticoagulants for the prevention and treatment of thromboembolism will reflect 16 years' experience with such therapy. The value of anticoagulants in chronic heart failure, acute myocardial infarction, the prevention of subsequent myocardial infarction, angina pectoris without previous myocardial infarction will be related to large groups of patients and compared with an equal number of controls. The contraindications for such treatment and the management of hemorrhagic complications, as well as their significance, will be represented by illustrative cases.

A simple accurate bedside blood prothrombin time employed during the last 16 years in the management of anticoagulant therapy will be demonstrated. The ease of performance, simplicity, reproducibility has made long-term anticoagulation feasible and practical.

The Value of Laboratory Tests in Predicting Atherosclerosis, Laurance W. Kinsell, M.D., Oakland, Calif.

The question of the reliability of laboratory measurements as diagnostic or prognostic agents in individuals known or suspected of having atherosclerosis is still a highly controversial issue. The experience of the members of the Institute for Metabolic Research is as follows:

1. The measurement of total cholesterol plus total lipids gives more information than the measurement of total cholesterol alone. It gives at least as much information as the "atherogenic index," at a much lesser cost.

2. In individuals under 45, the level of blood lipids has a high correlation with atherosclerosis. Elevated lipids are defined as cholesterol values above 180, and total lipid values above 650 mg. per 100 ml. of plasma. Individuals in this age group with values well in excess of these figures should probably be placed on a dietary program designed to normalize lipids.

3. Blood lipid measurements in individuals past 60 are much less reliable

as indices of atherosclerosis, to such a degree that one may wonder whether one is dealing with a different disease.

4. There is considerable over-lapping in individuals between 45 and 60.

5. Other laboratory findings which are still in an investigative phase will be considered.

Dietary Therapy, Lester M. Morrison, M.D., Los Angeles.
Therapy Influencing the Absorption and Metabolism of Cholesterol, George L. Curran, M.D., St. Louis.
Sponsored by the Missouri Heart Association.

10:30 a.m. Intermission to View Exhibits.

11:00 a.m. Speaker sponsored by the Missouri Society of Internal Medicine.

1:30 p.m. House of Delegates. Crystal Room.

THE COUNCIL

The Council met at Hotel Chase, St. Louis, December 12, 13, 1959, with J. H. Summers, M.D., Lebanon, Chairman, presiding. Those present were Drs. Summers, Donald M. Dowell, Chillicothe; J. J. Wimp, Kirksville; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; Ben M. Bull, Ironton; Ralph Perry, Kansas City; R. O. Muether, St. Louis; John I. Matthews, Jefferson City; Charles R. Doyle, St. Louis; Vernon E. Wilson, Columbia; H. M. Hardwicke, Jefferson City; Hollis N. Allen, St. Louis; Edwin M. Powell, Springfield; Stanley S. Peterson, Springfield; Rolla B. Wray, Nevada; Durward G. Hall, Springfield; Joseph C. Peden, St. Louis; Messrs. John Buckner, Springfield; Hollister Smith, St. Louis; Lemoine Skinner, Jordan Singleton, Ray McIntyre, T. R. O'Brien and Miss Helen Penn, St. Louis.

EXECUTIVE SECRETARY'S REPORT

Mr. O'Brien gave the following report:

1. *Missouri State Crippled Children's Service.*—As required by the new statute, a general advisory committee for the Crippled Children's Service, with a majority of physicians in its membership, has been appointed. The members of the Committee are: Robert W. Augustine, M.D., St. Joseph; Warren C. Baker, M.D., Savannah; Fred J. Biggs, M.D., Poplar Bluff; Thomas H. Burford, M.D., Ralph K. Earp, M.D., Luke A. Knese, M.D., St. Louis; Edgar L. Clayton, M.D., Senator Jack S. Curtis, Mrs. Justine Phillips, Springfield; John H. Gaskins, M.D., Frank L. Dickson, M.D., Kansas City; Rosellen E. Cohnberg, M.D., Monett; Daniel B. Landau, M.D., Hannibal; Jack Mullen, M.D., Bonne Terre; Thomas G. Otto, M.D., Senator Albert M. Spradling, Jr., Cape Girardeau; Mr. Proctor N. Carter, Mrs. Chilton J. Estes, Mr. Neil C. Wortley, Jefferson City; Sydney E. Jaynes, D.M.D., Columbia; Charles L. Judd, D.O., Unionville; Mrs. Carl L. Luecke, Joplin; Mrs. A. L. Luther, Memphis; and Mrs. Hal McHaney, Kennett.

The first meeting of the advisory committee was held in Columbia on October 25. One matter of interest to the Council may be the following statement taken in substance from the minutes of the committee meeting:

"The fees for professional personnel were discussed. There is need for re-examination of this schedule now that insurance payments are acceptable. In this regard it was noted that insurance payments are not, under the law, made to the State Crippled Children's Service, but to the doctor or hospital directly. This will present some administrative difficulties in instances when insurance payment is made to a physician since the Crippled Children's Service will not allow him fees if insurance compensation is available."

This raises a question as to what the fee relationship between doctors and the Crippled Children's Service really ought to be. Surely the doctor should receive insurance payments directly. If such payments are inadequate for the care rendered, should they be supplemented by the Service?

2. *Chiropractic.*—There is continuing evidence of the vigorous efforts of organized chiropractors in the state to extend their practice and their practice rights. The October issue of the *Bulletin of the Missouri Chiropractic Association* contains a significant new definition of chiropractic recently accepted by the North American Association of Chiropractic Schools and Colleges. It points up the need for our continuing concern about chiropractic, and it goes as follows:

"The science of chiropractic deals with the relationships between the articulations of the vertebral column and the nervous system and the role of these relationships in the restoration and maintenance of health."

This language recalls the attempt in the last General Assembly to "broaden the scope of chiropractors" practice rights to include "areas adjacent" to the spine. This new definition would seem to aim at making the chiropractic area of practice coextensive with the nervous system throughout the entire body.

3. *Meetings and Conferences.*—The A.M.A. Legislative Conference was held in St. Louis, October 2 and 3 to make plans for rallying and alerting the profession to the danger of legislation like the Forand Bill in the election year of 1960. Speakers included Governor Smylie of Idaho and Congressmen Curtis of Missouri and Alford of Arkansas.

On October 19, Dr. Perry addressed a meeting of the Fifth Councilor District at Columbia. He spoke primarily of the challenge posed by the Forand Bill. I was also asked to review briefly recent developments in Missouri Medical Service.

The State Medical Journal Conference was held in Chicago on October 26 and 27. Mr. Ovid Bell of Fulton, printer of Missouri Medicine, was on the program. A picture of our journal was featured on the front page of the conference program, and in the competitive scoring for excellence Missouri Medicine rated 89, which is a very high score. Very few journals got a mark of 90, which was the highest mark. Our editor, contributing editors, the editorial board, the publication committee and Helen Penn and Ray McIntyre are all to be complimented on this fine showing. (I'd like at this time to

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rheumatic
disorder
is more
than salicylates
alone
can control...

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break into my report and call on Helen to give you a more detailed report on how the grading was done and what the rating of our journal means.)

JOURNAL CONFERENCE

Miss Penn explained that at the conference the grading of journals was done by O. M. Forkert Associates, publications consultants, and that journals were judged as national publications on various things.

EXECUTIVE SECRETARY'S REPORT CONTINUED

The MSMA Committee on Aging met in Jefferson City on October 29. The staff was represented at the meeting by Ray McIntyre and Jordan Singleton of our public relations office. The report of the committee is on the agenda of this meeting of the Council.

The Committee on Medical Economics met in St. Louis on November 1.

Dr. Hardwicke and Dr. Belden of the State Division of Health were present, and the staff was represented by Helen Penn, Lemoine Skinner, Jordan Singleton and me. The committee report is also on this Council meeting agenda.

The special committee to study the question of representation of constituent medical societies in the MSMA House of Delegates and the adequacy of the present Councilor District set-up met in St. Louis on November 15. There was thorough discussion of both matters, but the committee deferred action until a subsequent meeting. It was felt that the St. Louis County Society, whose representative was unable to attend the first meeting, should be heard. Helen Penn, Lemoine Skinner, and I were present for the staff.

On November 16 and 17, Ray McIntyre and Jordan Singleton were MSMA staff representatives at the A.M.A. Regional Conference on Aging at Kansas City. President Perry and Drs. Stanley Peterson and Rolla Wray of the MSMA Committee on Aging took part directly in the proceedings of the Conference.

During the week of November 30 your delegates attended the session of the A.M.A. in Dallas, and they will have a report for you at this meeting. I shall not comment on my own notes of the A.M.A. meeting until after the delegates' report, and then I expect there will be nothing that I can add.

4. *Miscellaneous Matters.*—A question was asked at the last meeting of the Council regarding the proposed meeting of Missouri Hospital Administrators, trustees and chiefs of staff. I am now able to report definitely that plans for such a meeting have been put off at least until next year.

I hope the Council will be as pleased as the staff is when I say the new addressograph machine you authorized us to buy is doing a first-rate job. The girls in the office are delighted with it. On the subject of the girls, I report with a mixture of pleasure and regret that Margo is soon to have a baby and will be leaving us to take up what, perhaps, we can all agree is more important work.

MEDICARE

Mr. O'Brien presented the revised contract for Medicare and explained that the program would revert to those provisions included prior to October 1958 when the program was curtailed. After discussion, it was decided that a bulletin should go to members pointing out the changes and that the present contract should be signed.

BLUE SHIELD

It was announced that a major medical program had been placed in effect by Blue Shield and Blue Cross of St. Louis for employees of the Southwestern Bell Telephone Company. The program for the Telephone Company is a combination of basic coverage with major medical. There is a small deductible amount which the subscriber pays. After the basic coverage is used up, the combined plans pay 80 per cent of remaining bills, the subscriber pays the remaining 20 per cent.

UNITED FUND

Mr. O'Brien announced that for the second year the Association office had received a plaque from the United Fund denoting that all employees had contributed.

MEETING ATTENDANCE REQUIREMENT

A letter from Dr. Michael, osteopathic member of the Board of the Healing Arts, was read in which it was suggested that attendance at medical meetings be a requirement for the biennial registration of physicians. In discussion, it was brought out that this provision had been taken out of the legislative bill establishing the board and that the Council would not have the prerogative to act on the question. On motion, the suggestion was referred to the Committee on Scientific and Postgraduate Work for study and possible referral to the House of Delegates.

LIAISON COMMITTEE WITH OSTEOPATHS

A letter requesting that a liaison committee meet with members of the osteopathic association to discuss mutual problems was discussed and on motion, the Chairman was instructed to appoint a committee of five council members to serve on such a committee.

MEDICO-LEGAL

The following suggested legislation referred by the board of the Missouri Academy of General Practice was presented.

Married Persons Declared to Be Adults, Regardless of Age

"All persons who have contracted a lawful marriage, shall be deemed to be of the age of majority and to be an adult person for the purpose of entering into any contract respecting medical or surgical care and to consent to medical care and surgical operations for himself or herself and for his or her spouse and children."

Physicians Lien Law

"All physicians and surgeons who render services to patients who shall receive or become entitled to receive monies by way of compensation, claim, judgment, settlement or insurance contract for the condition or injury for which such services are rendered shall have a lien upon such monies for the reasonable value of such services, and said lien shall be valid and binding both as to the person to whom said services had been rendered and any person, firm or corporation who shall, either by contract, settlement or judgment, pay or be bound to pay any such person to whom said services have been rendered, provided notice of such lien shall be mailed to said person, firm or corporation."

On motion, these were given to Mr. Nobel for study and later report to the Council.

MEDICAL ECONOMICS

The report of the Committee on Medical Economics, Dr. A. P. Rowlette, Chairman, was presented as follows:

The Committee on Medical Economics met at the Coronado Hotel, St. Louis, November 1, 1959, with A. P. Rowlette, M.D., Moberly, Chairman, presiding. Present were Drs. Rowlette, John R. Forgrave, St. Joseph; George L. Hawkins, St. Louis; John T. Crowe, Cape Girardeau, members of the Committee, and Drs. H. M. Hardwicke and E. A. Belden, Jefferson City; Messrs. Jordan Singleton, Lemoine Skinner, Tom R. O'Brien and Helen Penn, St. Louis.

Division of Health.—Dr. Hardwicke reviewed some of the work of the Division of Health and read a letter from the A.M.A. which outlined the functions of a public health department, as follows:

Letter from A.M.A. to Missouri Division of Health, October 27, 1959

"The committee is strongly of the opinion that the basic services of the departments of public health should be limited to the fields of vital statistics, public health education, environmental sanitation, public health laboratory services, prevention of disease and control of communicable diseases such as the diseases of childhood, venereal diseases and tuberculosis. The committee is of the opinion that under no circumstances and under no guise whatever should public health departments enter into the diagnosis of disease, except for the aforementioned purposes and in the case of indigents, and further that public health departments should undertake no treatment of disease except in the case of indigents, with the exception of venereal disease and tuberculosis in such instances as when the treatment of nonindigents is not available through private sources."

At this time, the State Division of Health is responsible for the following indigent care programs:

1. Ellis Fischel State Cancer Hospital, Columbia, Mo. This hospital was assigned to the State Division of Health after the adoption of the new Missouri Constitution in 1946. The State Cancer Commission is in charge of the patient care aspects of this institution.

Patients are accepted for care and treatment when they are referred by a physician and when the county court certifies that they are indigent. At present, the hospital is operating at 104 per cent of capacity.

2. Trachoma Hospital, Rolla, Mo. This hospital is closed. However, a clinic for eye care is conducted for a short time, twice per week. Patients are eligible for care if they have Trachoma or have had the disease. All others are referred to practicing physicians for treatment.

3. State Tuberculosis Hospital, Mount Vernon, Mo. Patients are accepted in this hospital, whether indigent of not, for care and treatment of tuberculosis.

Dr. Hardwicke stated that he attended a recent meeting of the State and Territorial Health Officers in Washington, D. C. A copy of a proposed bill (to be introduced in Congress in 1960) and a statement regarding "health department administration of indigent medical care programs" were developed. An informal poll of State Health Officers is to be made on the following questions:

a. If requested, could your state health department assume responsibility for the administration of the medical care program for the needy in your State?

b. If requested, would you, as a state health officer, be willing to assume this responsibility?

In addition, the Executive Committee of the State and Territorial Health Officers is "to study, both independently and in cooperation with the A.M.A. and the American Public Health Association, possible methods, other than those proposed by the Forand Bill, for providing medical care for needy people not provided for under present programs."

The committee discussed this question thoroughly and agreed that further information about indigent care programs under other state health departments should be obtained. It was stated that Maryland and Florida are now operating such programs. The committee deferred action on this subject until a later meeting.

Homemaker and Home Care Programs.—Dr. Hardwicke asked for the approval of pilot programs, in areas where county societies approve, of homemaker and home nursing care programs.

A homemaker program is one in which the health department secures the cooperation of lay volunteers who will work an average of three hours per week. Such work would be requested by the private physician through a public health nurse for services in the home of sick patients. Such work might consist of making beds, cleaning and other household routines.

A home nursing care program is one in which the health department secures a roster of registered and practical nurses who are not working at their profession. Such persons may be willing to devote a few hours per week to perform nursing duties in the home of sick patients. They would be paid by the sick person and would work under the supervision of the attending physician. Thus, certain patients could be cared for at home instead of in hospitals.

The committee considered many aspects of these programs, including the fact that our standing committee on aging has been concerned with the same programs. It was agreed that if such programs should be approved, they should be on a pilot study basis and that a report should be made to the committee in a reasonable length of time. In view of the fact that the MSMA Committee on Aging is studying these same programs, it was agreed to defer final action until a later time.

Vendor Program.—The rules and regulations of the State Division of Welfare for the hospitalization of eligible recipients have been outlined. These were developed by the Director with the assistance and advice of an Advisory Committee of seven persons. MSMA members on this Advisory Committee are: Dr. Avery Rowlette, Chairman, Committee on Medical Economics and Dr. Stanley S. Peterson, Chairman, Committee on Aging.

The act took effect on August 29, 1959. In substance, that act provides that an eligible recipient of public assistance funds is entitled to receive inpatient hospital care for the treatment of a medical emergency or acute serious illness. "A medical emergency or acute serious illness" is one which places a patient's life in danger, and therefore requires immediate hospitalization.

The patient must be hospitalized in a hospital licensed by the State Division of Health. Claims for reimbursement for any one admission shall not exceed 10 days care. Claims for reimbursement for any recipient for any fiscal year, July 1 through June 30 of next year, shall not exceed twenty days.

"Completely Bedfast and Totally Disabled."—Pay-

ments made to a recipient of public assistance who is completely bedfast and totally disabled shall not exceed $100 per month. In order to qualify, the patient must be (a) completely nonambulatory, to the extent that he cannot or should not leave the bed except by being lifted bodily; and (b) must have been confined for at least the past 30 days and will be completely bedfast for at least an additional 90 days; and (c) must be unable to participate in any gainful activity.

Discussion—After 90 days, December 1, 1959, the State Division of Welfare will evaluate the program to see whether or not the program may be running under or over the monthly allocations for the programs. If under, the hospital rate of $5.00 per diem may be increased. If over, the amount will be lowered.

It was reported to the Committee that various county courts which had made payments to the hospitals for the care of recipients of public assistance have refused to continue such payments. As a result, these hospitals are receiving only the amount paid by the State Welfare Division. In many instances the hospitals are receiving less than formerly. It was pointed out, however, that only a few county courts had been making payments. It seems too early to evaluate the results now.

It was recommended that an effort be made to obtain exact information as to haw many county courts which paid hospitals prior to the Vendor law now refuse to pay them.

Medicare.—The Committee discussed this program briefly regarding a letter received from Medicare Headquarters. The letter follows:

Letter from Medicare to T. R. O'Brien.—"In the presence of much talk, speculation, and news reports on the potential restoration of benefits to the Medicare Program, we should like to clarify the status of this situation and furnish you with preliminary guidance on that subject.

"In this regard, it may come to your attention, through news media, that certain Medicare benefits will be restored to the program. Some of these news releases will also indicate that the restoration of care will become effective 1 January 1960. However, despite such positive announcements on the restoration of care, no final or definitive action has developed which would permit us to confirm this information at this time. Nevertheless, we are optimistic that such changes in the program will be made. This possible restoration of care has been the topic of serious study and consideration for some time. As discussed and considered, this reestablishment would approximate, with certain refinements, the same services authorized under the program prior to 1 October 1958.

"The Secretary of Defense, by authority of the act, is empowered to reinstate those provisions of care as they existed prior to 1 October 1958. However, we feel it appropriate to advise that any such reinstatement of care properly should, and must, coincide with the desires and intent of the Congress, and agreeably comply with the budgetary considerations that inherently affect the scope and operation of the Medicare Program. In addition, complete staffing within the uniformed services must be effected. It is, therefore, necessary for us to currently refer to this subject primarily as a probability, the materialization of which is dependent upon many factors.

"In any event, we might point out that there is no doubt that the Medicare Permit System, inaugurated as part of the 1 October changes, will be permanently retained as an operational requirement for those dependents residing with their sponsors. Experience has proven this system to be a satisfactory measure in the promotion of optimum utilization of uniformed services medical facilities, an objective often expressed by members of the Congress in hearings and discussions on this program.

"May we assure you that, when any reinstatement of care is officially announced, your office will be promptly appraised of this development, and detailed information will be furnished at the earliest moment.

"We indeed appreciate your most capable assistance in administering Medicare which, through cooperative effort, can only result in further advancing achievement of mutual goals in a continuing efficient and successful program."

In regard to the statement of the A.M.A. on indigent care by public health, Dr. Hardwicke said he would like further clarification. He pointed out the trend to place many medical care programs under welfare departments rather than under public health department.

On motion, the report was accepted.

TREASURER'S REPORT

The Treasurer reported on the financial condition of the Association and, on motion, the report was accepted.

BUDGET

The Treasurer presented the following budget for 1960, which was approved by the Council:

Salaries	$ 62,338.00
Office Rent	4,700.00
Postage	4,500.00
Printing & Stationery	5,000.00
Journal expense	50,000.00
Telephone & Telegraph	2,800.00
Insurance & Retirement	6,500.00
Professional fees	4,000.00
Taxes—payroll	1,850.00
Travel expense	7,000.00
Committees	43,850.00
Furniture & Fixtures	1,500.00
General expense	3,000.00
Total	$197,038.00

LIFE INSURANCE

A life insurance program for members of the Association was reported on further and it was said that a representative would appear before the Council if desired. After discussion, it was voted that the Chairman appoint a committee to talk with insurance representatives and report to the Council.

FIELD SECRETARY'S REPORT

Mr. McIntyre said that county society and regional meetings had been especially well attended this fall. He told of the following meetings which he had attended: Southeast Missouri Cancer Conference, public relations meeting of the Chariton-Macon-Monroe-Randolph County Medical Society, Conference on Physicians and Schools, Mineral Area County Medical Society, Lincoln-St. Charles County Medical Society, Committee on Control of Venereal Disease, Committee on Aging, Missouri Academy of General Practice, Regional Conference on Aging, seven county meeting at Sedalia, American Medical Association and Grand River Medical Society.

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He announced a two day meeting on "Chest Diseases" to be presented in Mount Vernon on January 9 and 10, Committee on Maternal Welfare on January 10, Committees on Rural Health and Medical Education and Hospitals on January 17; Eighth Councilor District meeting at Mount Vernon on February 9, National Health Conference at Grand Rapids on February 25-27.

He reported on the preceptorship program at the University of Missouri and said that preceptees were with physicians at the present time. Four groups will be completed during the winter months.

ANNUAL SESSION

Dr. Matthews presented the program for the 1960 Annual Session. He said that scientific exhibits would be mostly by invitation.

He discussed annual sessions in general and said that an attempt would be made to determine just who attended, why they did and from where they came and that a simple form would be at the registration desk attempting to obtain this information. He asked that each Councilor encourage his membership to attend.

The possibility of entertaining new members for the purpose of indoctrination was discussed and on motion, Dr. Matthews was instructed to plan something in this line at an expenditure of not more than $1,000. That amount was added to the 1960 Budget for the Annual Session.

He said there would be a charge for the refresher courses. He outlined some of the publicity that will be used to acquaint members with the program and the meeting. It was decided that a tear-sheet appear in Missouri Medicine that physicians may use on their door or waiting room explaining their absence for the annual session.

DEAN WILSON

Dr. Wilson addressed the Council briefly expressing his appreciation for being invited and encouraging Councilors to contact him at any time on things dealing with the University.

A.M.A.

Dr. Hall spoke briefly and Dr. Wray more extensively in reporting the Clinical Session of the A.M.A. Dr. Wray pointed out that the full report would be published in the January issue of Missouri Medicine.

WHITE HOUSE CONFERENCE

Dr. Summers appointed Dr. Ralph Perry and Dr. C. Thorpe Ray to represent the Association on the Committee on Aging at the 1961 White House Conference.

COMMITTEES

Dr. Perry appointed Dr. W. F. Francka to fill the unexpired term of the late Dr. W. Logan Allee on the Committee on Constitution and By-laws. He appointed Dr. G. W. Winn to fill the unexpired term of the late Dr. E. R. Breuer on the Committee on Medical Economics.

COMMITTEE ON AGING

Dr. Peterson presented the report for the Committee on Aging as follows:

The Committee on Aging met at the Missouri Hotel, Jefferson City, October 29, 1959. Those present were Drs. Stanley S. Peterson, M.D., Chairman, Springfield; C. Thorpe Ray, M.D., Columbia, Ray McIntyre and Jordan C. Singleton, St. Louis, J. P. Russell, M.D., Missouri State Division of Health, Jefferson City, was present for the majority of the meeting.

Quality of Medical Care in Nursing Homes.—At the request of Dr. Hardwicke, Acting Director of the Missouri State Division of Health, the committee discussed the question of the quality of medical care in nursing homes under the Nursing Home Licensing Law.

At the outset, the committee discussed and questioned the rigidity of some of the regulations promulgated in connection with the nursing home law—for example, the regulation that requires that each nursing home patient must be visited by a physician once each month. The committee pointed out that a monthly visit may or may not be necessary to provide good medical care depending upon the individual case involved. Agreeing that perhaps some standard must be set up for rating purposes, the committee believes that the attending physician in the final analysis must be the judge of the kind and quantity of care required, and that this cannot be set by a rigid calendar criterion. The committee believes that the regulations applied to nursing home licensing should be reviewed to determine if they are realistic and practical as they pertain to good medical care—and not only for convenience in administration.

In any case, the committee believes that the relationship between the attending physician and the patient, or the nursing home operator as an agent of the patient, is a private relationship.

If there are deficiencies on the part of the physician or nursing home operator in following state regulations or in the keeping of records, the committee believes these should first be called to the attention of the operator who holds the nursing home license. It is then up to the operator to work out the difficulty with the physician. If such deficiencies are not corrected, the Division of Health then has recourse against the operator through the nursing home law.

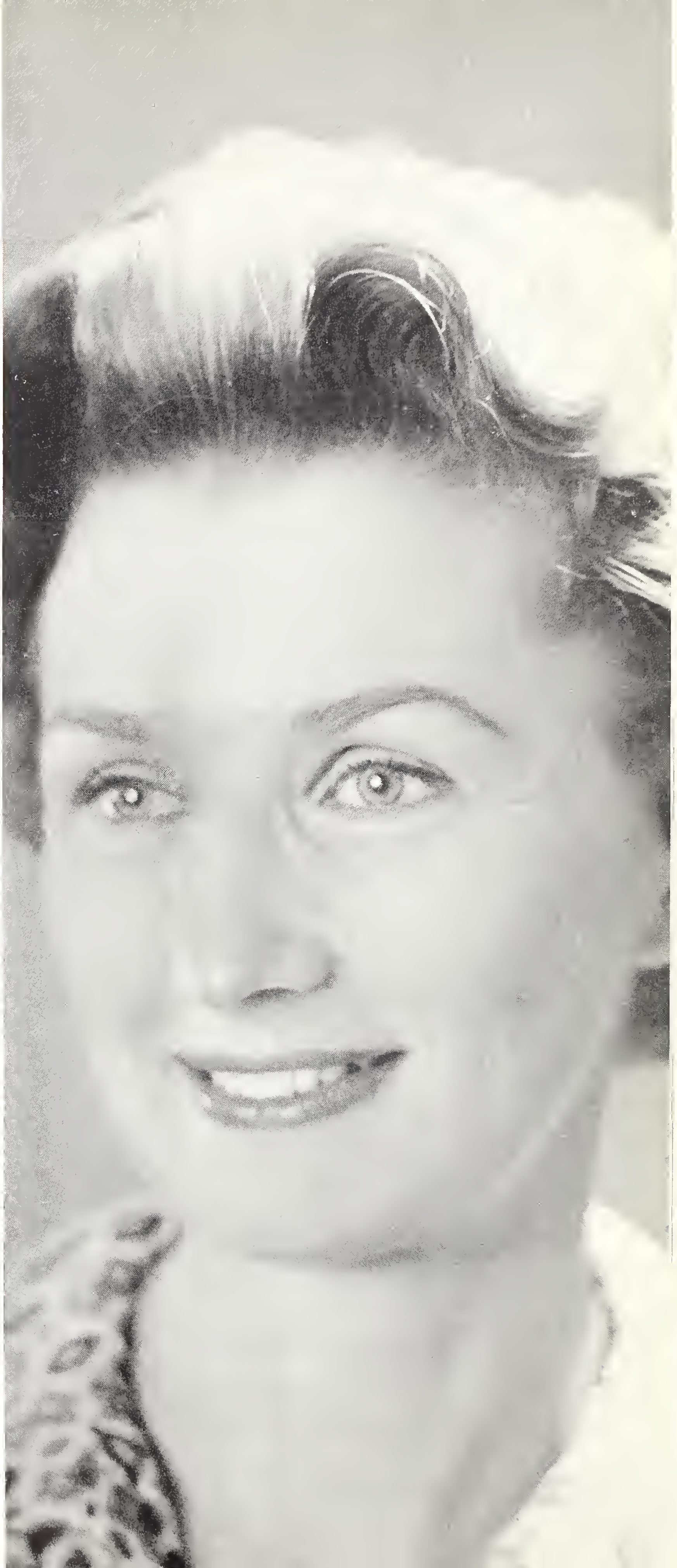
As the committee sees it, it is the nursing home that is affected in the enforcement of the regulations, and thus the situation should be handled through the operator and not directly with the physician. There would seem to be no state board which would have responsibility directly with a physician in relation to compliance with nursing home regulations. Certainly a report to the Board of Registration for the Healing Arts would not be in order since such matters are outside its purview.

Finally, in any question about the nursing home law or regulations, the committee feels that they cannot in any way recommend that the Division of Health relinquish or avoid any responsibilities which are charged to it under the law.

Registry of Nursing Personnel.—Dr. Hardwicke has mentioned that one of the responsibilities of the public health nurses is the organization of community services for the chronically ill, debilitated and the aged. He suggests that public health nurses be charged with the development of nurse registries in the various communities over the state.

The committee commends this idea, which it believes will fill a definite need in any communities in Missouri. Any help that can be rendered in making additional nursing services available is desirable, and if the public health nurse can aid in this, the committee believes it would be very worthwhile.

In these activities, however, the committee feels that



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the Division of Health should consult and coordinate its plans with the state nurses' association and other nurses' organizations. Further, we feel that it is very important that care be taken not to upset or disturb any present arrangements for nurses registries now in operation. The Division of Health should recognize and work through existing organizations where these are operating.

It would be useful, also, the committee feels, to designate in any registry the type of personnel listed as Registered Nurse, Licensed Practical Nurse, etc.

Information About Public Health Nurses! In discussing this subject, the committee agreed that it would be valuable to both the Division of Health and the practicing physician if more information were disseminated to physicians about the duties, capabilities, limitations and work of the public health nurses in the state. Realizing that the Division of Health is doing some work along this line, the committee believes that these informational efforts should be continued and extended. The committee recommends that space in Missouri Medicine which is available to the Division of Health be used for this purpose.

Homemaker Services.—Dr. Hardwicke has also suggested that the public health nurse is charged with the responsibility of developing community services—homemaking services and personal services—for the chronically ill, etc.

The committee agrees that the attending physician is concerned with the welfare of the patient and the family, including the possible need for housekeeping and personal services beyond health or medical care. It agrees that the physician should be informed of the availability of such services so that he may advise the patient when necessary. Certainly if there is any type of medical care involved, this should be given under the direction of the physician, and good communication should be maintained between the nurse, the person rendering homemaking service and the physician.

The committee had some question, however, about the place of such homemaking services under the Division of Health. In some areas of the state such services are now being rendered by voluntary agencies, and it is the impression of the committee that these are looked upon more as social and welfare services than as health services.

Dr. Russell.—Dr. Russell brought to the attention of the committee Dr. Hardwicke's request for the appointment of a member of the MSMA Committee on Aging to Task Force No. 4—Health and Medical Care—of the Missouri Committee for the 1961 White House Conference on Aging. The committee will report this request to the president of the association for action.

Dr. Russell also mentioned Dr. Hardwicke's question as to whether the MSMA Committee on Aging plans to develop a program on the practicing physician's approach to the care of the aging which might be used in a report on activities of other agencies in Missouri dealing with aging. The committee agreed to forward such programs to the Division of Health as they are developed.

Development of State Program for Physicians in Relation to Problems of Aging.—The committee discussed development of programs for aging, particularly in relation to the resolution on the Vendor program passed by the House of Delegates in 1958 and the resolutions on free choice of physician and panel plans passed by the House in 1959. The committee interprets the policy of the House as providing that physicians should furnish medical care for the people on a fee-for-service basis, with patients being responsible for payment through their own funds, insurance, panel programs or other such sources. Patients unable to pay through these means should be treated by physicians on the traditional basis of reduced or no fees. The committee believes that association policy points out that there is no need for recourse to government aid or payment of physicians' fees through government programs for the indigent.

The committee also feels that medical eare financing is no different from the financing of other necessities and that there is no reason for people to be treated differently on the basis of age alone. In the committee's opinion, simply because a person reaches a certain age is no reason that fees for medical care should be reduced for him, or the ways of financing his care should be different than for others.

Suggestion for a State Program.—It was the committee's feeling that the Missouri State Medical Association should not develop any program for the aging in isolation. Instead, its program should be to integrate the efforts of physicians into projects being carried on by other organizations—to encourage physicians to give aid, guidance and active interest to community activities in this field.

Using the six points recommended by the American Medical Association for community programs, the state association and Committee on Aging should encourage and assist local medical societies to carry on active programs at the local level.

The committee recommends that the Council request each local society in the state to set up a Committee on Aging with an active and energetic chairman. These local committees would then be charged with development of a local action program with the state committee's assistance. This program would then be presented to the entire local society to enlist every member in active implementation.

The elements of such a local program might include:

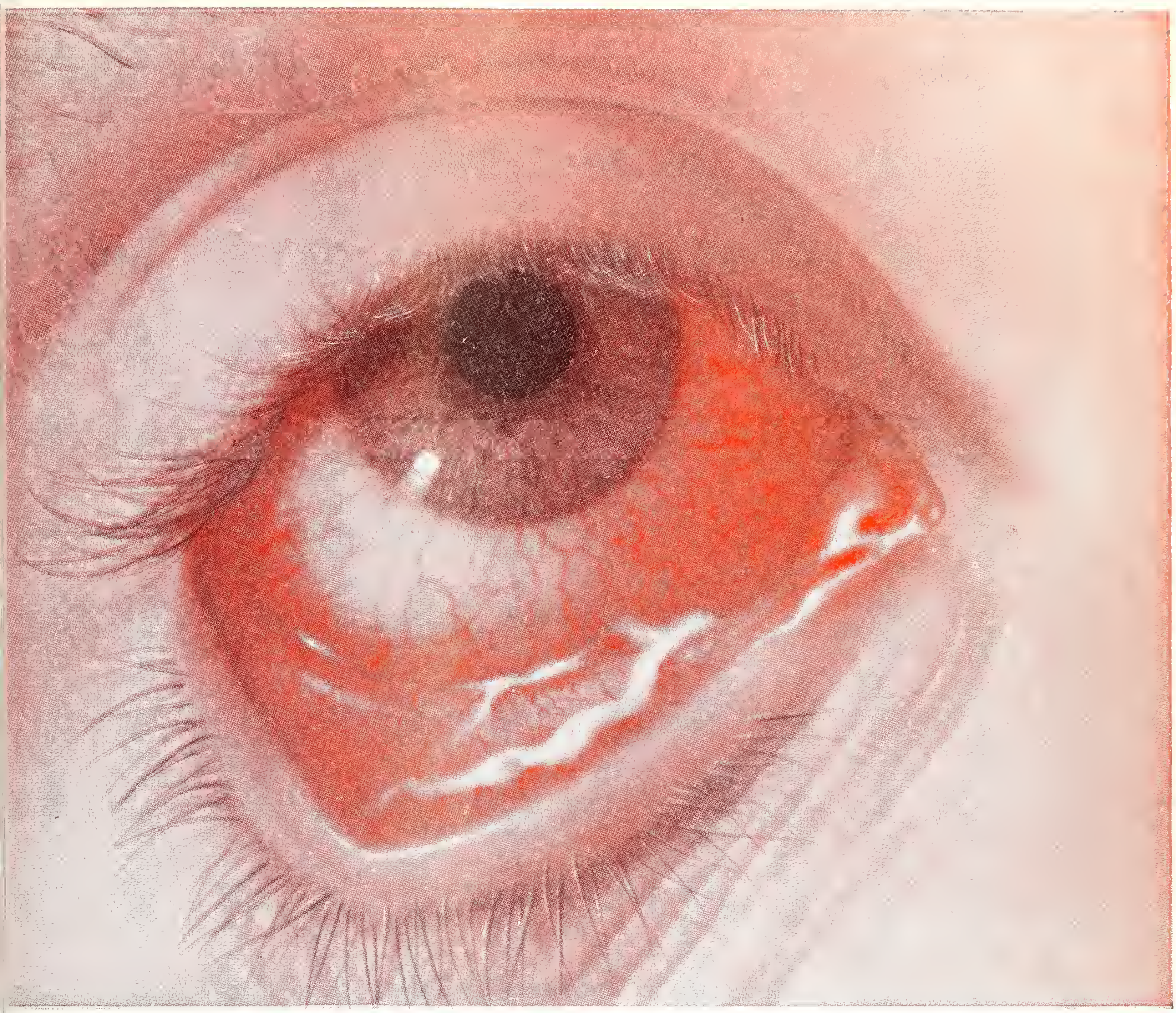
1. A program of dissemination of information on aging to the public.
2. Active guidance by physicians to all community organizations which have projects dealing with aging to provide proper medical orientation.
3. A positive public relations and publicity program to inform the public as to what is being done by the medical profession to help solve the medical and social problems of aging.

It is emphasized that the committee is thinking of such a program as a continuing program, to be carried on for many years to come. It should be one of the most important projects in the activities of each local society.

Community Resources for the Aging.—Discussion brought out that members of the committee felt that the full resources and facilities for the aging in the various communities and the state are not fully known or being sought out and utilized, either by profession or by the people.

Many facilities already exist which will serve the aged, if they are sought out and brought to bear on the problem. The committee felt that this was one of the ways in which the local committees on aging could serve—by organizing to provide information, liaison, investigation of resources, and by leading efforts to fill gaps in community resources when found.

The problem of rehabilitation in older people was mentioned as another example of the activities that might be carried on by local committees. Rehabilitation, not necessarily for employment, but for personal



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1. Lippmann, O.: Arch. Ophth. **57**:339, March 1957.
2. Gordon, D.M.: Am. J. Ophth. **46**:740, November 1958.

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care, should be emphasized as a means of freeing the patient family and community from bedfast care. Interest in this can be stimulated by the local committees through informational programs to the profession and public.

Forand Bill.—In discussion of legislation of the Forand Bill type, the committee felt that the permanent defeat of such schemes will only come as the by-product of activities of physicians in the community, demonstrating that problems are being solved without the need for such things as the Forand Bill. While a frontal attack on this particular legislation may have to be mounted in the next year, the only permanent solution to the recurring introduction of such ideas is to demonstrate that the problems are being effectively taken care of without them.

To this end the Committee believes that increased interest in—and participation in civic and community activities by the physician will assure a proper direction of activity in the field of aging as well as other areas of endeavor.

Dr. Peterson said that all material that has gone out on the White House Conference points out something wrong with each phase and has a government answer to the criticism. He encouraged physicians to take places on task forces, saying that there is need for real representation of medicine in the conference.

On motion, the report was accepted with authorization to continue the work of the committee.

LABORATORY MEDICINE

Dr. Allen presented the report of the Committee on Laboratory Medicine as follows:

Routine Serologies by Laboratories of State Division of Health.—Dr. H. M. Hardwicke, Acting Director, State Division of Health, wrote to Dr. Ralph Perry, July 9, 1959, relative to some problems of the State Division of Health. The above listed item was referred to this Committee. The part of Dr. Hardwicke's letter which relates to the subject matter is attached as *EXHIBIT "A." EXHIBIT "B"* shows copy of letter to Dr. Hardwicke and *EXHIBIT "C"* is copy of his reply.

In view of the reply shown in Exhibit C, especially, "Perhaps it would just be best for the Division of Health to continue to do those serologies which in its opinion would not be done in any other laboratory. In this fashion we could continue to decrease the number of serologies done by us," the Committee recommends that no further action be taken at this time. In addition, the Committee wishes to reaffirm its willingness to provide laboratory services without cost or at a reduced cost whenever the referring physician will advise the private laboratory of such financial circumstances of a particular patient.

Advertising by Laboratories.—The question of advertising by private laboratories in medical publications has been raised. In general, the American College of Pathology has followed the practice of not permitting advertising by laboratories in any medical publications unless the rules of individual medical society may permit advertising by any and all members of the society.

The A.M.A. has repeatedly stated that laboratory medicine is a part of the over-all practice of medicine just as much as surgery, medicine or any other phase; and that laboratories, whether they are under the supervision of doctors of medicine or others should follow the same rules in advertising as apply to all other physicians.

Therefore, in order that a uniform policy be established, the Committee recommends that the Association follow the A.M.A. Code of Ethics relative to advertising; and that component county medical societies, which have publications, be advised that advertising by laboratories not be accepted unless advertising by all other county society members, listing specialties, is permitted.

Exhibit A—Proposal from the Division of Health re: Laboratory Services.—When public health laboratories were first established in Missouri, there existed an inadequate number of private laboratories to service practicing physicians. Public health laboratories have continued to do routine procedures for practicing physicians. Many of these procedures are now available to physicians from private laboratories.

The public health laboratory program in keeping with all other programs of the Division of Health took a cut in appropriations. If public health laboratories are to continue to assume responsibility for purely public activity such as water, sewage, milk, food, it will be impossible for them to assume responsibility for routine procedures submitted by private physicians. The law requires that public health laboratories do prenatal and premarital serologies when these are submitted to them by physicians. This we will continue to do. We will also continue to do those procedures which are not now available in private laboratories. Such procedures would include virus studies, finite identification of enteric organisms, mycology, studies, and if possible, phage typing.

It is our suggestion that the public health laboratories discontinue all routine serologies submitted by private physicians. The only exception to this would be prenatal and premarital serologies, and routine serologies submitted by those physicians whose names have been approved by the Council of the Missouri State Medical Association. We in the Division of Health feel quite strongly that agencies of government should not use tax money in competition to private enterprise unless the law specifically requires us to do so or unless the health of the public is menaced.

Exhibit B—Dr. Allen's Letter to Dr. Hardwicke re: Laboratory Services.—Your suggested procedure in laboratory procedures was accepted by the Council of the Missouri State Medical Association, and made in a report to the House of Delegates at their last meeting. This report was accepted by the House of Delegates. There is one difference between the statements made in your letter to Dr. Perry and those principles that were accepted by the Council and the House of Delegates. In the third paragraph of your letter on Laboratory Services, you have underlined the following: "routine serologies submitted by those physicians whose names have been approved by the Council of the Missouri State Medical Association."

I would like a clarification of what this means. I do not believe the Council would approve this part of the recommendation. It would necessitate them investigating the necessity of certain physicians submitting routine tests to the State Health Laboratories. I can see no reason why any one physician, anywhere in the State, could be singled out by the Council as having privileges that other physicians do not have. I would like to know your philosophy for such reasoning, because as far as I know, this idea has never been brought up to the Council or the Committee on Laboratory Medicine. Aside from that, it would seem

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that your suggestions have been accepted both by the Council and by the House of Delegates.

Exhibit C—Reply from Dr. Hardwicke re: Laboratory Services.—Your comments on Laboratory services is interesting. I am aware that the House of Delegates approved the secession of laboratory procedures for private practitioners of medicine by the Division of Health. I am also equally aware that almost without exception every local medical society in the state has condemned the Division of Health for ceasing to do serologies. It appears that there are areas within the state in which physicians are practicing which are of such a low economic level that it is impossible for patients to pay for routine laboratory procedures. A possible solution to this dilemma might be found in having the Council officially recognize such areas and officially request the Division of Health to offer physicians in these areas the services of the public health laboratories. I recognize that such a procedure would be of a stop-gap nature. Perhaps it would just be best for the Division of Health to continue to do those serologies which in its opinion would not be done in any other laboratory. In this fashion we could continue to decrease the number of serologies done by us.

We in the Division of Health recognize and appreciate the support which the Council and particularly the Laboratory Committee have given us. We also realize that apparently there exists a difference of opinion between local medical societies and the Council. Such differences of opinion might make it difficult for our district health officers to work closely and in harmony with local practicing physicians. I do not believe that there is a need for a special meeting of either of your committees.

Dr. Allen said that the Committee on Control of Venereal Disease would recommend that a letter go to all members, which would disseminate some of the information in this report.

HOSPITAL AND PROFESSIONAL RELATIONS

Dr. Allen presented the report of the Committee on Hospital and Professional Relations as follows:

Hospital Licensing.—Dr. H. M. Hardwicke, Acting Director, State Division of Health, wrote Dr. Ralph Perry, July 9, 1959, relative to some problems of the State Division of Health. The above listed item was referred to this Committee. The part of Dr. Hardwicke's letter which refers to this subject is attached as Exhibit A. See copy of Exhibits B and C which relate to this matter.

Your committee recommends the suggestions contained in Dr. Hardwicke's letter be approved. These are shown in the second and third paragraphs of Exhibit A.

Your committee suggests that the State Licensing authority advise the hospitals of these rulings and that the Chiefs of Staff in each instance be informed.

Callaway County Hospital Inspection by Division of Health.—This hospital was inspected recently by the State Licensing Authority. Exhibit D, attached, is copy of letter to Mr. Neil Wortley, State Division of Health. Exhibit E gives his reply.

A copy of his reply was furnished to Dr. Stuart, who wrote as follows: "This will acknowledge your letter of October 23, relative to correspondence on the Callaway County Memorial Hospital. I received a letter from Dr. John J. Brown, Chief of Staff of Callaway County Hospital, today and he tells me that a copy of the letter from Mr. Wortley of the Division of Health to you was read at the Staff meeting last night and that Callaway County Memorial Hospital Staff was unanimously pleased with Mr. Wortley's interpretation of the records. We wish to thank you for your efforts on our behalf."

We have been advised since that time that the Callaway County Hospital has received its license.

Your committee believes that the matter has been concluded to the satisfaction of all concerned.

"In Quest of Health"—An Educational Project of the Iowa Hospital Association.—One of the members of the Committee forwarded a copy of a bulletin to me relative to this subject. We asked Mr. O'Brien to obtain copies of the material from Iowa. A copy of the material was sent to us on a loan basis for two weeks.

We are attempting to learn something about the endorsements in Missouri and the distribution. We shall report to you later. In the meantime, one copy is available for your inspection.

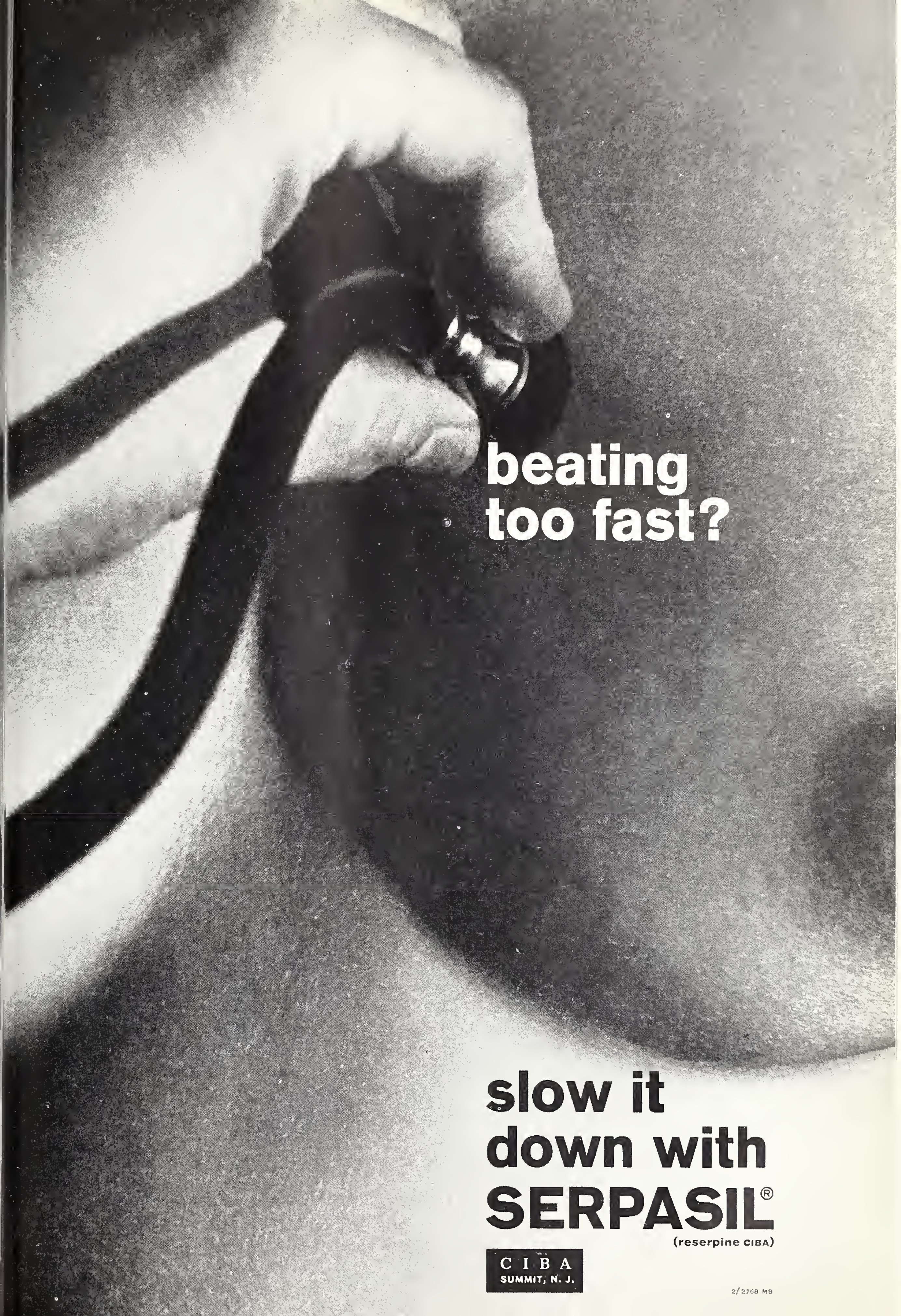
Exhibit A re: Hospital Licensing.—You are aware that the Division of Health is charged with the licensure of all operating hospitals in the State of Missouri with the exception of those operated by agencies of government. The regulations and codes for the licensure of hospitals were for the most part written by members of the Missouri State Medical Association and by practicing hospital administrators. The majority of the community hospitals are now licensed.

The hospital is the doctor's workshop. The quality of medical care rendered in the hospital is the responsibility of the physicians practicing in the hospital. It is our suggestion, therefore, that we in the Division of Health do not attempt to evaluate patient care within those hospitals which are inspected by the Joint Board for Accreditation. Since the hospital licensing law is specific concerning fire safety and sanitation, we will continue to evaluate all hospitals in these two areas.

We will continue to evaluate hospitals not inspected by the Joint Board for Accreditation in accordance with the regulations and codes. Those which are deficient in fire safety and sanitation will be turned over to local authorities for action. Those which are deficient in patient care and not evaluated by the Joint Board but in compliance with regulations and codes for safety and sanitation will be free from any action by the Division of Health. The local medical society in the area in which the hospital is located and the physicians practicing within the hospital will receive copies of our reports on patient care deficiencies.

It would seem that this procedure might remove from the Division of Health much of the criticism leveled at it by practicing physicians during the past few years. The Division of Health will retain its responsibility for the safety of the public as well as its responsibility for the protection of the public against preventable illness. The Division of Health will return to the practicing physician the full responsibility for the quality of care rendered their patients. We will continue to offer practicing physicians services in the areas of epidemiology and infection control should these services be requested.

Exhibit B. Reply from Dr. Allen to Dr. Hardwicke—Hospitals.—The procedures set forth in your letter concerning hospitals meets with my approval and I believe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will meet with the approval of most of the doctors in the State. Although the rules set up for patient care may have been set up by doctors, it could cause considerable difficulties if inspection along these lines were carried out by anybody outside of the medical profession itself. The doctors of the state have long insisted that patient care is entirely in their province. They have not necessarily always fulfilled their responsibilities but I believe the responsibility should be thrown back completely on their shoulders.

As you state, the evaluation of the hospitals as far as sanitation and fire safety are concerned, belongs in the category of the Department of Health and I can see nothing wrong with your suggested plan of operation. As an aside on this subject, I have heard some criticism which is very hard to evaluate concerning inspections. It would seem, on certain occasions, a hospital would be inspected and certain requirements made. On another inspection, when they believe all of the requirements would be met, another inspector would find other objections. As I say, such criticism is hard to evaluate, but I do know that such a thing happens when the inspector for an accreditation of hospitals comes around and as this criticism has been made from several different places, it is possible that unknowingly, it may have happened in your department. It would, of course, make one quite perturbed to meet the specifications of one inspection and then find that the interpretation at another inspection might be different. This is purely an aside to the main problem, but I thought you would like to have the criticisms as I have heard them, reported to you.

Exhibit C. Reply from Dr. Hardwick re: Hospital Licensing.—Your comments regarding the hospital licensing program are very interesting. We, too, have heard conflicting reports particularly in relation to fire safety inspection. I think these criticisms are well founded. Basically it is not the business of the Division of Health to establish and maintain fire safety. This is a profession in its own right. We have tried for several years to get the Legislature to establish a fire marshal's office in the state. Such efforts have been opposed successfully by very powerful groups. It is understandable that relatively untrained individuals in the field of fire safety would render conflicting reports. We are attempting to straighten this matter out.

Exhibit D. Dr. Allen's letter in part to Mr. Neil C. Wortley.—A copy of the Hospital Licensing report, from the Division of Health to Callaway Memorial Hospital, 828 Jefferson Street, Fulton, Missouri, has been turned over to me by the Council of the Missouri State Medical Association, in my capacity as Chairman of the Hospital and Professional Relations Committee.

It seems that the staff objects to this report, particularly the last part of the second paragraph under (a) concerning a statement made that, "Minutes of these discussions should be concisely recorded to include a brief clinical abstract of the various cases presented and of pertinent discussions relating to selected deaths, unimproved cases, complications, infections, etc., of patients in the hospital at the time as well as those recently discharged."

I can find nothing in the Missouri Hospital Licensing Law, regulations and codes, that could conceivably demand such records of a hospital.

Before this is taken up with my committee, I would like your reaction concerning this entire program in terms of the regulations and codes as set up by the Division of Health.

The only code that I could find that it might be under is No. 8 on Page 88, and there is nothing here concerning the keeping of minutes of such discussions. A simple statement in the minutes that the cases were analyzed would, in my opinion, satisfy the code and probably should be all that is found on any permanent record.

I would be pleased to have your comments or those of Dr. Russell concerning this report.

Exhibit E. Reply from Mr. Wortley in part to Dr. Allen.—This will acknowledge your letter of October 2, 1959, relative to recommendations included in a licensing survey report to Callaway Memorial Hospital in Fulton, Missouri.

The basis of the entire comment made under 2a of the above report was that of Regulation No. 1 on pages 87 and 88 of the Regulations and Codes. As you know, this regulation is concerned with the professional staff of the hospital and briefly outlines the duties, responsibilities and functions to be carried out by the staff as an organized, self-governed entity within the hospital family. From our interpretation of the various Codes, we endeavor to obtain compliance only within the framework of recognized standards as established and adopted by members of your profession. On occasion, we may also call attention to deficiencies found to exist with respect to the staff by-laws, rules and regulations which have been established and adopted by the particular hospital staff and approved by the governing body of that hospital.

Typical of the disadvantages faced in attempting to determine compliance in such areas on the basis of only periodic surveys or inspections, considerable emphasis must, of necessity, be placed upon the records and other written evidence available at the time. This then is the primary purpose in reviewing this material and the reason we ask that it be kept in sufficient detail to provide such evidence of compliance.

In this respect, we might also point out that from our own hospital experience and from occasional reviews of survey reports sent out by the Joint Commission on Accreditation of Hospitals we find that the same or similar terminology is generally used, although the "Standards for Hospital Accreditation" merely states that "Adequate minutes of all meetings shall be kept."

Similar terminology has been used in a number of reports sent to hospitals in the past. In an effort to avoid such misunderstanding in the future, we suggest the use of modified terminology whereby the recommendation would read, in effect, "The minutes of medical staff meetings should be so recorded as to reveal a thorough review and analysis of the clinical work being done in the hospital."

We certainly appreciate your calling this matter to our attention, and wish you and your committee to know that our only intent in administering this program is to promote a constantly improving quality of care for hospitalized patients in Missouri.

By the direction of J. P. Russell, M.D., Director, Section of Hospital and General Services.

On motion, the reports were accepted.

IOWA SCHOOL MATERIAL ON HEALTH

Material which has been promoted in Iowa by the hospital association, to be distributed through the schools, was presented. It was pointed out that the material placed practically all emphasis on the hospital as the center of health. The feeling of the Council was that the physician should have had a more prominent place in the pictures and literature. It was reported that it had been heard that it might be used in Missouri.

On motion, it was decided to contact the Department of Education in Missouri and get more definite information for further study and action.

COMMITTEE ON CONTROL OF VENEREAL DISEASE

Dr. Powell presented the report of the Committee on Control of Venereal Disease as follows:

The Committee on Control of Venereal Disease met at the Missouri Hotel, Jefferson City, October 28, 1959. Present were Edwin M. Powell, M.D., Chairman, Springfield; T. E. McMillan, M.D., Kansas City; E. M. Cannon, M.D., St. Louis; A. W. Neilson, M.D., St. Louis; Robert B. Bristow, M.D., St. Joseph; John Byrne, M.D., St. Louis; H. M. Hardwicke, M.D., E. A. Belden, M.D., and J. P. Russell, M.D., Missouri Division of Health, Jefferson City, Mo.; Hollis Allen, M.D., St. Louis; and Mr. Ray McIntyre, Field Secretary.

Venereal Disease on the Rise.—It was brought out that on the national level the proportion of the venereal disease cases involving the age group under 20 has risen alarmingly in the last three years. The specific reason for this is not known. The committee feels that the increase in venereal disease among young people is a symptom of a larger problem and is associated with juvenile delinquency, sexual promiscuity and illegitimacy.

Venereal Disease Control.—After considerable discussion the committee agreed that the responsibility for the identification of venereal disease and for its irradication rest in joint efforts of public health personnel and practicing physicians. Follow up difficulties on venereal disease cases and their contacts pose large problems for private physicians in most cases. Public health personnel for the most part are in a strategic position to follow reported cases of venereal disease.

With this in mind the committee studied again the new morbidity reporting system for venereal disease which was developed through a pilot study under the direction of the State Division of Health in four laboratories in St. Louis from July 1, 1956, through December 31, 1957. This reporting form, for laboratories to use, is composed of two parts, one part going back to the physician requesting the serology and the other part of the report to be sent by the laboratory to the local health department indicating that tests have been reported to specific physicians.

Dr. Hollis Allen, Chairman of the Laboratory Committee of the State Medical Association, discussed this reporting system fully from the laboratory point of view. Representatives from the State Division of Health presented their ideas as to how this reporting system could be used by public health personnel in cooperating with private physicians in handling venereal disease cases.

After considerable discussion it was agreed that some simplification of the form for the reporting system be made. The agreement also was that the reporting form be in two parts, one part to be sent by the laboratory

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depresses appetite and elevates mood
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eases tensions of dieting
(yet without overstimulation, insomnia or barbiturate hangover)

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Dosage: One tablet one-half to one hour before each meal.

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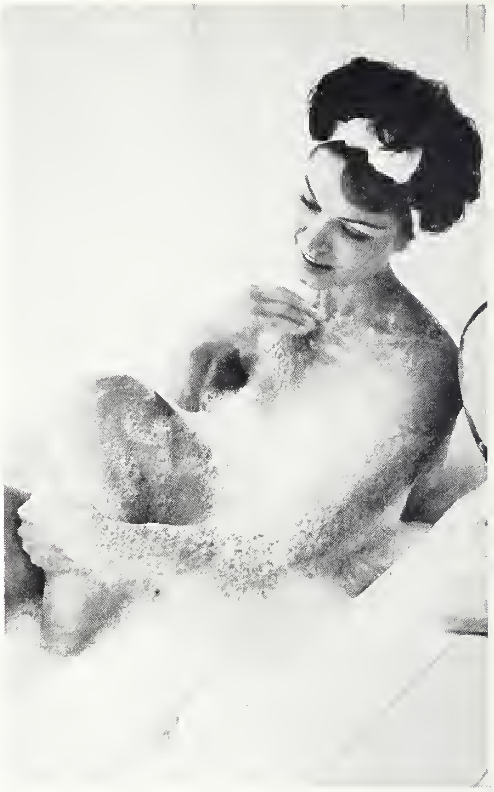

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of many micro-organisms. "The douche solution is an effective agent against Trichomonas Vaginalis, Monilia Albicans, anaerobic organisms including a potent strain of streptococci that sometimes cause severe infections, and other non-specific vaginal micro-organisms."[1]

TRICHOTINE actually favors epithelial growth and healing, and the relief it affords from pruritis is quite striking.

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to the referring physician giving the report of any serology tests; the other part of the form to be sent to the Division of Health by the laboratory indicating that the referring doctor had been sent reports of serology tests without naming the patient. On those reports received by the Division of Health showing positive serology test, direct contact would be made by personnel of the Division of Health with the private practitioners whose patients were involved. A discussion with the physician then would be made as to ways and means of follow up.

Actions.—1. The committee requested the State Division of Health to simplify the form to be used in the reporting system as much as practical.

2. The committee recommends to the Council of the Missouri State Medical Association that all members of county medical societies be informed of the proposed venereal disease morbidity reporting system via the new simplified form, as appended, and which will be available from the Division of Health. (Suggested letter also appended.)

3. The committee recommends that the Laboratory Committee of the State Association approve this reporting system and secure the approval of the Missouri Society of Pathologists for the same.

Medication and Treatment of Venereal Disease.—For years the Division of Health has supplied upon request medication for the treatment of venereal disease. These medications are mailed directly to the physician who may receive payment for the treatment of his patient. Except in unusual circumstances, the supplying of medications to physicians for the treatment of private patients or the paying of physicians for the treatment of the private patient is being discontinued by the Missouri Division of Health. The committee approves this action of the Division. The Division will furnish, upon request, free drugs to doctors to treat indigent venereal disease cases. The committee approves of this procedure.

Article for Missouri Medicine.—The committee feels that it is now a propitious time to publish an article in Missouri Medicine which will give the basic facts in the diagnosis and treatment of venereal disease and the reporting thereof. Dr. Neilson agreed to assume the responsibility with the assistance of Dr. Belden of the Division of Health for preparing this article and submitting it to the editor of Missouri Medicine.

Suggested Letter.—The Venereal Disease Committee of the Missouri State Medical Association met recently with representatives of the Missouri Division of Health to work out plans for an improved venereal disease control program in Missouri. Dr. Hollis Allen attended this meeting, representing the Laboratory Medicine Committee.

It is recognized by all practicing physicians that syphilis and gonorrhea can be spread only by people who are infected with these two diseases. It would, therefore, seem indicated that the full resources of the venereal disease program of the Division of Health be made available to physicians to discover and bring to treatment the infectious contacts of any cases which they may see in their offices. Should it happen that the physician in attendance upon a case has the time and energy to pursue a vigorous case-finding program, then there would be no need for the epidemiologist and venereal disease workers of the Division of Health to assist him. Most physicians, however, are not in this happy circumstance and yet it is obvious that treating the victim of a contact is only discharging a portion of the physician's responsibility.

It is recognized by all practicing physicians that an accurate index of the incidence of venereal disease is necessary to the proper control of both syphilis and gonorrhea. Private laboratories are being requested to report by number only positive serologic tests. The health department will, therefore, be in possession of a proper basis for reporting the statistics of venereal disease. It will also be in a position to offer its services to those physicians who have reported such diseases. An increase or decrease in the incidence of venereal disease is of moment to all practicing physicians.

Reporting of all venereal disease cases to health departments is essential for adequate appraisal of the venereal disease problem, for effective follow-up of contacts, and for program planning. A plan to improve and facilitate venereal disease reporting was discussed by our committee and is being submitted to your society for comments. Since virtually all syphilis is diagnosed by laboratory tests, it is proposed that laboratories report positive or reactive tests, by number only, to the Division of Health for appropriate follow-up activity. At the same time, the laboratory would supply the attending physician with a suitable form for reporting the case to the health department. A rough draft of a proposed form for this purpose is enclosed.

You will note that this procedure does not violate the physician-patient relationship or the physician-laboratory relationship. At the same time, it would permit more adequate follow-up and add greatly to the validity of morbidity statistics. Such a program is particularly desirable now that private laboratories are performing a larger proportion of syphilis serologies.

Before initiating this program, the Missouri State Medical Association committees on Venereal Disease and Laboratory Medicine would like to know whether or not it would be acceptable to Missouri physicians. We would appreciate knowing the reaction of your society.

Reporting Form.—The enclosed laboratory report on your patient indicates a reactive serology or other abnormal finding. If, after further evaluation of this patient (careful history, examination and repeat tests) a diagnosis of a venereal disease is made, the case should be reported to your local health department on the attached morbidity report. If, after evaluation, you determine that this patient does not have a venereal disease, please so indicate on the face of the morbidity report. Be sure to indicate lab number or numbers. A pre-addressed, postage-free envelope is enclosed for your convenience in mailing the report. The result of the test(s) is being reported by laboratory number only to the local or district health department.

Lab. No. .... Name of Lab. ....

PHYSICIAN'S CONFIDENTIAL VENEREAL DISEASE MORBIDITY REPORT

(It is understood that under no circumstances will the health department contact this patient without the express consent of the reporting physician.)

Name or Initial .... SMW Race .... Sex ....

Address .... Age ....

City .... County ....

Lab. No. or Numbers .... Name of Lab. ....

Disease ....

Tetracycline Phosphate Complex (TETREX®) in the Therapy of PNEUMONIA

U. S. PAT. NO. 2,791,609

Preferably, antibiotic therapy should be based on pretreatment culture of the offending pathogen, but in bacterial pneumonia the problem may well be too pressing to permit the required delay of 24 to 48 hours. A differential diagnosis among bacterial pneumonias, based on such clinical grounds as speed of onset, sepsis and pain may guide the choice of antibiotic for initiation of therapy.

Should clinical judgment dictate that antibiotic therapy be started immediately, at the same time a sputum sample or a subglottic swab can be sent to the laboratory for culture and sensitivity studies. If the response to the first antimicrobial agent proves unsatisfactory, a reasonable basis for changing therapy will then be at hand.

Choosing the Antibiotic

Since therapy must be started at once for bacterial pneumonia, it is advisable to choose a broad-spectrum antibiotic that quickly produces high levels of active agent (e.g., tetracycline phosphate complex, TETREX). Such an antibiotic probably has the best chance of controlling the pathogen, whether it be gram-negative or gram-positive. And if the laboratory report shows that the invading organism is much less sensitive to tetracycline than to other agents, the patient can then be changed to an appropriate antibiotic. If the difference in sensitivity is slight, then the possibility of side effects, sensitization, and toxicity should be evaluated before changing therapy to another antibiotic.

The greatest number of bacterial pneumonias are caused by pneumococci, which respond very well to penicillin, tetracycline, and chloramphenicol. Also, these antibiotics are usually effective against the other gram-positive coccal pneumonias. But penicillin is ineffective against the viral pneumonias and the gram-negative *Hemophilus influenzae* and *Klebsiella pneumoniae*. Although *K. pneumoniae* causes only about 1 to 2 per cent of pneumonia cases on the average,[1] these are apt to be acute and fulminating (Friedländer's pneumonia), with a high mortality rate if not effectively treated. Since pneumococcal pneumonia may be difficult to distinguish clinically from Friedländer's, except by gram-stained sputum smear, it may be wiser to start treatment with an agent also effective against Klebsiella.

Penicillin, however, in addition to having a limited spectrum, also causes many minor and some serious sensitivity reactions. In a recent survey[2] it was found that penicillin produced severe skin reaction. But most important was the observation that anaphylactic shock, with a fatality rate of about 9 per cent, was the most frequent serious reaction. Such severe reactions are almost always associated with parenteral administration.

Tetracycline is also clinically effective in primary atypical pneumonia.[3]

The tetracyclines (e.g., TETREX) have the advantage of a broad range of antimicrobial activity and low toxicity. And in addition, the physician does not have to trouble himself or his patients with repeated blood studies when he prescribes TETREX. Minor reactions such as gastric upsets or mild skin rashes occur occasionally. The most serious side effects are staphylococcal and monilial overgrowth, but these are rare and can be adequately controlled.

No one would deny that appropriate antibiotic therapy has greatly reduced morbidity and saved many lives of patients with bacterial pneumonia. Nevertheless, general supportive measures in the care of patients remain important even today. Especially in the desperately ill patient, antibiotics are not considered as substitutes for the individual evaluation, clinical observation and judgment of the physician.

Some Micro-organisms Susceptible[a] *to Tetracycline* (TETREX)[b]

Streptococcus; Staphylococcus; Pneumococcus; Gonococcus; Meningococcus; *C. diphtheriae; B. anthracis; E. coli;* Proteus; *A. aerogenes; Ps. aeruginosa; K. pneumoniae;* Shigella; Brucella; *P. tularensis; H. influenzae; T. pallidum;* Rickettsiae; Viruses of psittacosis and ornithosis, lymphogranuloma inguinale, primary atypical pneumonia; *E. histolytica; D. granulomatosis.*

[a] Some strains are not susceptible.

[b] Table adapted from Goodman, L. S., and Gilman, A.: The Pharmaceutical Basis of Therapeutics, 2nd edition, New York, The Macmillan Co., 1956, pp. 1322-1323.

References: 1. Wood, W. E., Jr.: In: A Textbook of Medicine. Edited by Cecil, R. L., and Loeb, R. F., 9th edition, Philadelphia, W. B. Saunders Co., 1955, p. 145. 2. Welch, H.; Lewis, C. H.; Weinstein, H. I., and Boeckman, B. B.: Severe reactions to antibiotics. A nationwide survey. Antibiotic Med. & Clin. Ther. 4:800 (Dec.) 1957. 3. Keefer, C. S.: The choice of an anti-infective agent. In: Drugs of Choice, 1958-1959. Edited by Walter Modell, St. Louis, The C. V. Mosby Co., 1958, p. 135.

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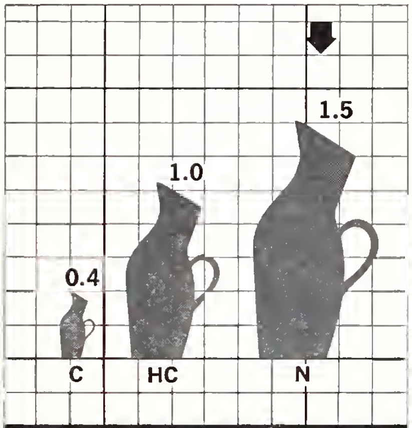
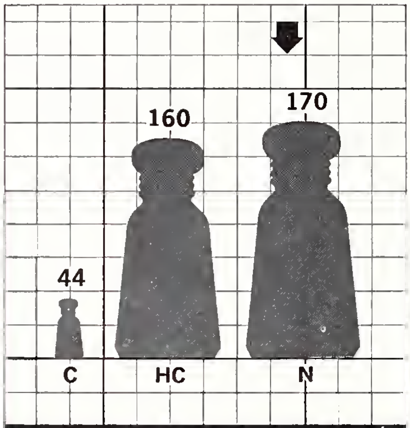
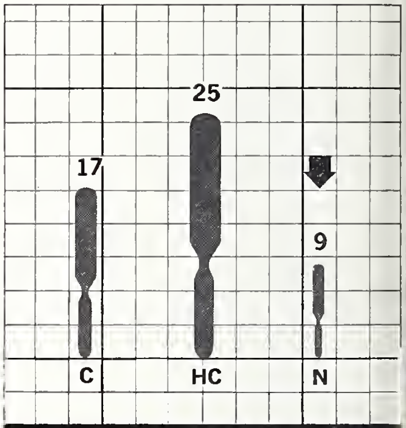
Comparison of electrolyte excretion pattern for the 24 hours following typical doses of chlorothiazide, hydrochlorothiazide, and Naturetin[1]



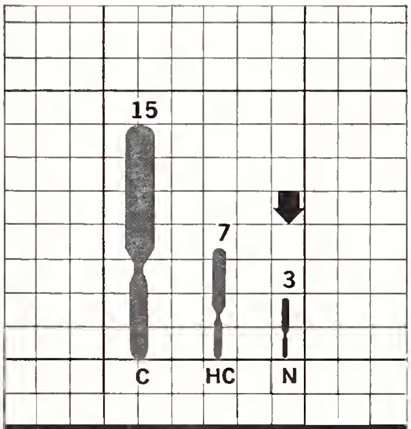
Urinary Volume (liters)
significantly increased
with Naturetin



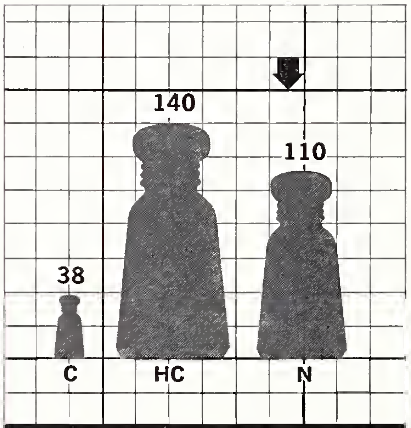
Natriuresis (mEq./24 hr.)
sodium excretion significantly
increased with Naturetin



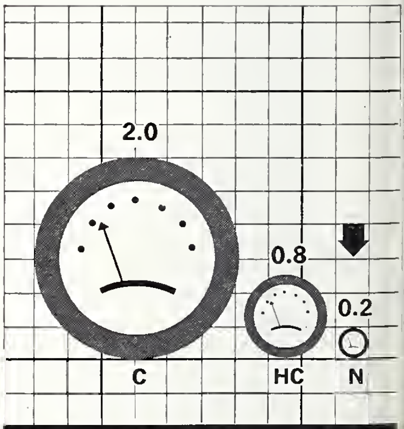
Potassium Excretion
(mEq./24 hr.)
least with Naturetin



Bicarbonate Excretion
(mEq./24 hr.)
least with Naturetin



Chloride Excretion
(mEq./24 hr.)
marked increases



Urinary pH
least increase with Naturetin

Typical Doses: Chlorothiazide – 1,000 mg.; Hydrochlorothiazide – 50 mg.; Naturetin (Benzydroflumethiazide) – 5 mg.

1. Adapted from: Ford, R. V., Squibb Clin. Res. Notes 2:1 (Dec.) 1959.

as it calms anxiety!

Smooth, balanced action lifts depression as it calms anxiety... swiftly and safely

Balances the mood – no "seesaw" effect of amphetamine-barbiturates and energizers. While amphetamines and energizers may stimulate the patient – *they often aggravate anxiety and tension.* And although amphetamine-barbiturate combinations may counteract excessive stimulation – *they often deepen depression.*

In contrast to such "seesaw" effects, Deprol lifts depression as it calms anxiety – both at the same time.

Acts swiftly – the patient often feels better within a few days. Unlike the delayed action of other drugs which may take two to six weeks to bring results, Deprol's smooth, immediate action relieves the patient quickly – often within a few days.

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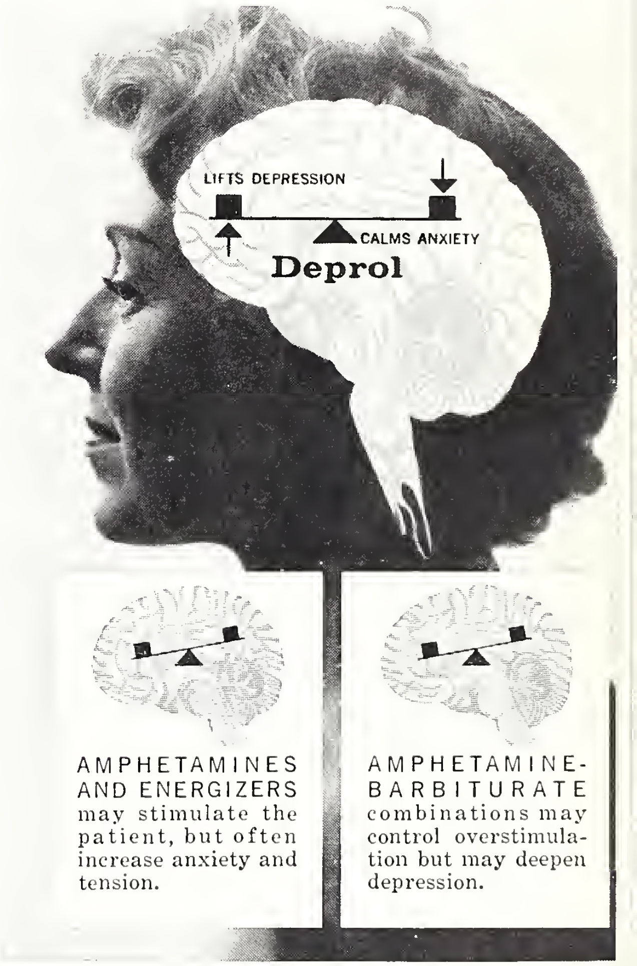

AMPHETAMINES AND ENERGIZERS may stimulate the patient, but often increase anxiety and tension.

AMPHETAMINE-BARBITURATE combinations may control overstimulation but may deepen depression.

BIBLIOGRAPHY *(10 clinical studies, 714 patients)*:
1. Alexander, L. (35 patients): Chemotherapy of depression – Use of meprobamate combined with benactyzine (2-diethylaminoethyl benzilate) hydrochloride. J.A.M.A. 166:1019, March 1, 1958. **2.** Bateman, J. C. and Carlton, H. M. (50 patients): Meprobamate and benactyzine hydrochloride (Deprol) as adjunctive therapy for patients with advanced cancer. Antibiotic Med. & Clin. Therapy 6:648, Nov. 1959. **3.** Bell, J. L., Tauber, H., Santy, A. and Pulita, F. (77 patients): Treatment of depressive states in office practice. Dis. Nerv. System 20:263, June 1959. **4.** Breitner, C. (31 patients): On mental depressions. Dis. Nerv. System 20:142, (Section Two), May 1959. **5.** McClure, C. W., Papas, P. N., Speare, G. S., Palmer, E., Slattery, J. J., Kanefal, S. H., Henken, B. S., Wood, C. A. and Ceresia, G. B. (128 patients): Treatment of depression—New technics and therapy. Am. Pract. & Digest Treat. 10:1525, Sept. 1959. **6.** Pennington, V. M. (135 patients): Meprobamate-benactyzine (Deprol) in the treatment of chronic brain syndrome, schizophrenia and senility. J. Am. Geriatrics Soc. 7:656, Aug. 1959. **7.** Rickels, K. and Ewing, J. H. (35 patients): Deprol in depressive conditions. Dis. Nerv. System 20:364, (Section One), Aug. 1959. **8.** Ruchwarger, A. (87 patients): Use of Deprol (meprobamate combined with benactyzine hydrochloride) in the office treatment of depression. M. Ann. District of Columbia 28:438, Aug. 1959. **9.** Settel, E. (52 patients): Treatment of depression in the elderly with a meprobamate-benactyzine hydrochloride combination. Antibiotic Med. & Clin. Therapy. In press, 1959. **10.** Splitter, S. R. (84 patients): The care of the anxious and the depressed. Submitted for publication, 1959.

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Thirteenth Annual Convention

St. Louis, Missouri

March 13, 14, 15, 16, 1960

TIME AND PLACE OF MEETINGS

Sunday, March 13

10:00 a.m. Board of Directors Meeting, St. Mary's Hospital.
1:30 p.m. Registration, St. Mary's Hospital, Assembly Hall, Ground Floor.
2:00 p.m. Business Meeting, St. Mary's Hospital, Assembly Hall.
4:30 p.m. Board of Directors Meeting, St. Mary's Hospital.
4:30 p.m. Tour of the Laboratory, St. Mary's Hospital, 6th Floor.
6:30 p.m. Buffet Supper, St. Mary's Hospital.
8:00 p.m. Business Meeting, Missouri Association of Blood Banks, St. Mary's Hospital.

Monday, March 14

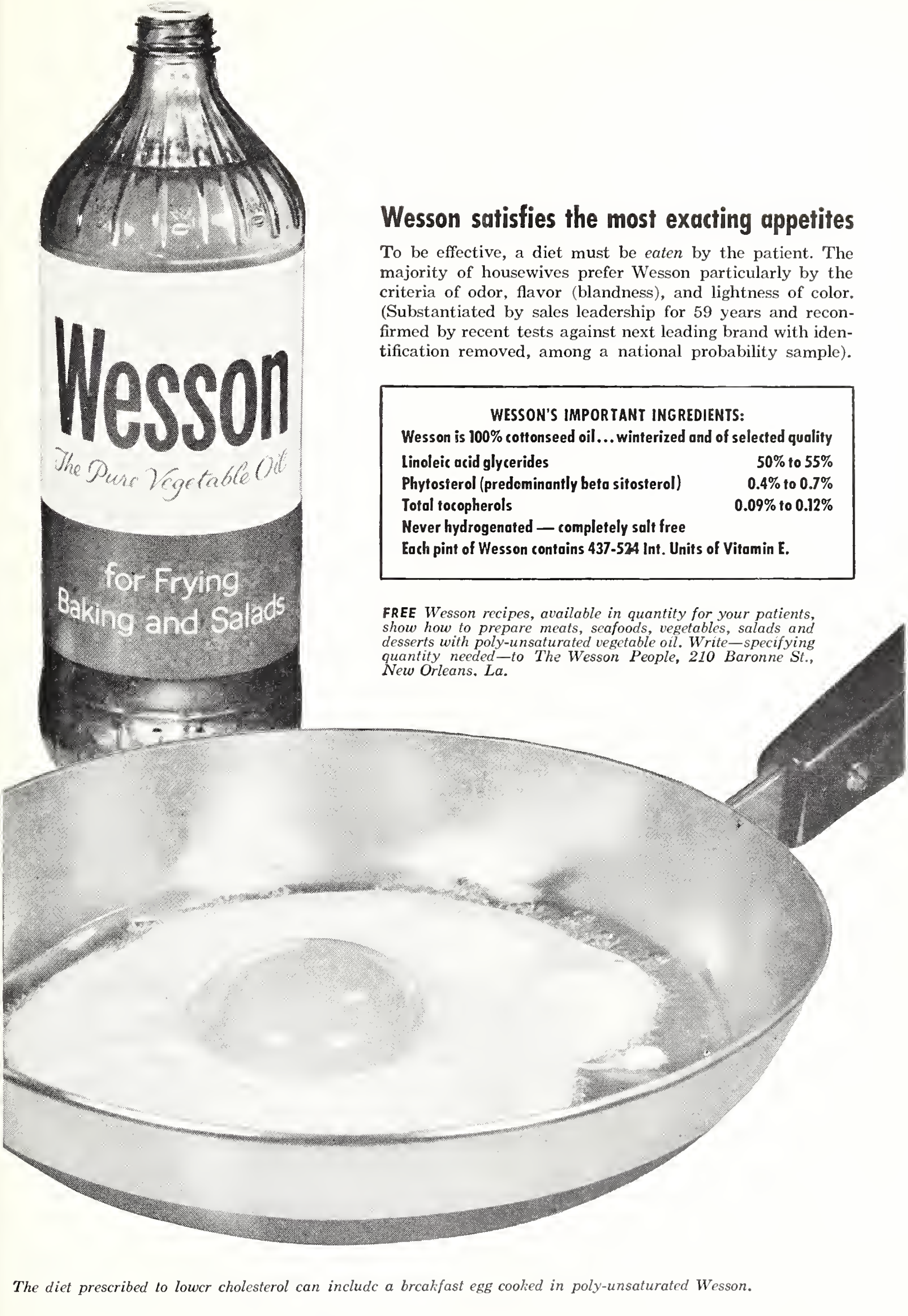
8:00 a.m. Registration, Sheraton-Jefferson Hotel, Room 1.
9:00 a.m. Scientific Session, Room 1.
10:00 a.m. Coffee Break.
10:15 a.m. Visit Exhibits.
10:30 a.m. Scientific Session, Blood Bank Panel, Room 1.
12:00 noon Lunch.
2:00 p.m. Scientific Session, Panel Discussion, Laboratory Diagnosis of Arthritis, Room 1.
2:00 p.m. Conference Clinic for Medical Technology Teaching Supervisors, Room 8.
3:15 p.m. Coffee Break.
3:30 p.m. Visit Exhibits.
3:45 p.m. Scientific Session, Room 1.
3:45 p.m. Conference Clinic for Medical Technology Teaching Supervisors, Room 8.
6:30 p.m. Social Hour Sponsored by Ortho, Henrici's Restaurant, Bel Air Motel, 4636 Lindell Blvd.
7:30 p.m. Banquet Sponsored by the Missouri Society of Clinical Pathologists for Members of MSMT, Henrici's Restaurant, Bel Air Motel.

Tuesday, March 15

8:00 a.m. Registration, Sheraton-Jefferson Hotel, Room 1.
9:00 a.m. Scientific Session, Room 1.
10:00 a.m. Coffee Break.
10:15 a.m. Visit Exhibits.
10:30 a.m. Scientific Session, Room 1.
12:30 p.m. Lunch, Faculty Dining Room, Des Peres Hall, West Pine and Spring.
2:00 p.m. Tour of the Pius XII Memorial Library, West Pine and Spring.
3:00 p.m. Scientific Session, Reception Room 104, Pius XII Memorial Library.
7:30 p.m. Annual Banquet, Missouri State Medical Association, Sheraton-Jefferson Hotel.

Wednesday, March 16

8:00 a.m. Registration, Sheraton-Jefferson Hotel, Room 1.
9:00 a.m. Scientific Session, Room 1.
10:00 a.m. Coffee Break.
10:15 a.m. Visit Exhibits.
10:30 a.m. Scientific Session, Room 1.



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Total tocopherols	**0.09% to 0.12%**

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SCIENTIFIC SESSION

Monday, March 14, 1960—Room 1

Anne J. Sommer, St. Louis, Presiding
Vincent P. Perna, M.D., Columbia, Alternate

9:00 a.m. Invocation, Reverend Gerald Sommer, Immaculate Conception Parish, West Alton, Missouri.
9:05 a.m. Medico-Legal Responsibilities of Medical Technologists in the Blood Bank, Charles Wheeler, M.D., Kansas City General Hospital, Kansas City.
10:00 a.m. Coffee Break.
10:15 a.m. Visit Exhibits.
10:30 a.m. Blood Bank Panel Discussion: Record Keeping in the Blood Bank.

The moderator and panelists will discuss what records need be kept, why keep records, and what value are crossmatch slides for records (stored).

Moderator: Frederick C. Coller, M.D., St. John's Hospital, Springfield.
Panelists:
Vincent P. Perna, M.D., Assistant Professor of Pathology, University of Missouri.
Bernadine Missel, B.S., M.T. (ASCP), Blood Bank Technologist, Firmin Desloge Hospital, St. Louis.
Margaret Lohrer, B.S., M.T. (ASCP), Blood Bank Technologist, Jewish Hospital, St. Louis.

12:00 noon Lunch.

SCIENTIFIC SESSION

Monday, March 14, 1960—Room 1

Erline Spickard, Springfield, Presiding
Elizabeth Sandbothe, Koeltztown, Alternate

2:00 p.m. Panel Discussion: Laboratory Diagnosis of Arthritis.

Current tests in use in the specialized arthritis laboratory will be discussed by members of the panel from the technical and practical standpoint. Implications of the results of the battery of tests will be summarized.

Moderator: George E. Gantner, M.D., Director of Laboratories, Firmin Desloge Hospital, St. Louis University School of Medicine.
Panelists:
Jack Zuckner, M.D., St. Louis University School of Medicine.
Carlo Caciolo, M.D., St. Louis University School of Medicine.
Robert Ramsey, M.D., St. Louis University School of Medicine.

3:15 p.m. Coffee Break.
3:30 p.m. Visit Exhibits.
3:45 p.m. Medico-Legal Responsibilities of Medical Technologists in the General Laboratory, Charles Wheeler, M.D., Kansas City General Hospital, Kansas City.

CONFERENCE CLINIC for MEDICAL TECHNOLOGY TEACHING SUPERVISORS

Monday, March 14, 1960—Room 8

Rachel E. Creager, Kansas City, Presiding
Joan Dexter, Kansas City, Alternate

2:00 p.m. Some Responsibilities of Teaching Supervisors in Schools of Medical Technology, William L. Drake, Jr., M.D., Associate Pathologist, St. John's Hospital, St. Louis.

This paper will set forth the duties to students individually, the avoidance of clashing with the mechanism and aims of the routine service function of the laboratory, and the responsibilities to subordinate teaching technologists.

2:20 p.m. Development of Teaching Aids for Approved Schools, Jeannette

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CHILDREN, 1 tablet 2 or 3 times daily. INFANTS, ½ tablet 2 or 3 times daily, as necessary.

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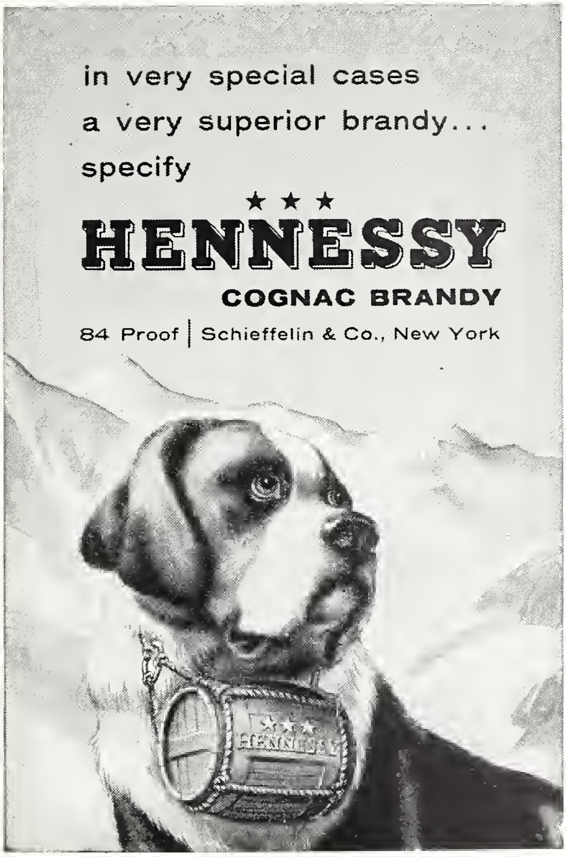

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Carter, Ph.D., M.T. (ASCP), Bacteriologist, St. Joseph's Hospital, Kansas City.

2:40 p.m. Curricula for Medical Technology Schools, Russell Kerr, M.D., C.A.P. (ASCP), Pathologist and Director, School of Medical Technology, St. Joseph's Hopsital, Kansas City.

The available aids in relation to the didactic part of the teaching program will be discussed.

3:15 p.m. Coffee Break.
3:30 p.m. Visit Exhibits.
3:45 p.m. Criteria for the Selection of Medical Technology Students, L'Nora Wells, B.S., M.T. (ASCP), Chief Technologist, Missouri University Hospital, Columbia.
4:00 p.m. Relationship Between College Preparatory and Approved School Programs, Sister M. Dolorosa, S.S.M., B.S., M.T. (ASCP), St. Louis University, St. Louis.

ANNUAL BANQUET

Monday, March 14, 1960

Henrici's Restaurant, Bel Air Motel
4636 Lindell Blvd.

6:30 p.m. Social Hour sponsored by Ortho Pharmaceuticals.
7:30 p.m. Banquet sponsored by the Missouri Society of Clinical Pathologists for members of the Missouri Society of Medical Technologists.
Master of Ceremonies: Victor B. Buhler, M.D., Kansas City.
Responsible Broadcasting: The Best Medicine for Community Ailments, Robert F. Hyland, B.S., Vice-President CBS Radio, General Manager KMOX Radio.

A presentation of the manner in which broadcasters can help correct social problems in their community with emphasis on KMOX's efforts in the fields of public health and welfare.

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trademark, brand of Phenformin HCl
the "full-range" oral hypoglycemic agent
...safely lowers blood sugar in mild, moderate
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SCIENTIFIC SESSION

Tuesday, March 15, 1960—Room 1

Mary Margaret Kelly, Kansas City, Presiding
Ruby Bell, Columbia, Alternate

9:00 a.m. Serotonin in the Diagnosis of Carcinoid Tumors, John Davidson, M.D., Instructor in Preventive and Clinical Medicine, Washington University School of Medicine.

A brief history of the development of our knowledge relating carcinoids and serotonin will be presented and the biochemical basis for the test currently employed will be reviewed. The discussion will center on the interpretation of the test and the avoidance of false positives.

9:30 a.m. Quality Control in the Clinical Chemistry Laboratory, Warren G. Hansen, Ph.D., Consultant in Biochemistry, St. Mary's Hospital Group, St. Louis.

Quality control will be defined and the philosophy of quality control discussed with special emphasis on the need for good controls in the routine laboratory. The literature will be reviewed briefly and the official position of the American College of Pathologists presented. The results of our efforts to achieve satisfactory controls will be presented and discussed. A system of quality control employing internal standards incorporated into pooled serum will be suggested.

10:00 a.m. Coffee Break.
10:15 a.m. Visit Exhibits.
10:30 a.m. The Whole Organ Micro-Sectioning Technic, Vernon Fisher, St. Louis University, St. Louis. Discussion and demonstration.
11:15 a.m. Fluorescent Antibody Technics, Peter Soto, M.D., Assistant in Pathology, St. Louis University School of Medicine.

The **"Start Low! Go Slow!"** dosage pattern with DBI enables a maximum number of diabetics to enjoy the convenience, comfort and satisfactory regulation of oral therapy in:

stable adult diabetes
unstable (brittle) diabetes
juvenile diabetes
sulfonylurea resistant diabetes

"Start Low! Go Slow" means low initial dosage (25 mg., or 50 mg. in divided doses, per day) with small dosage increments (25 mg.) every 3rd or 4th day until blood sugar levels are adequately controlled. Injected insulin is reduced gradually with each increase in DBI dosage. Satisfactory regulation of mild stable diabetes is usually achieved with DBI alone.*

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A discussion of the theory of the method and its application to research as well as to the clinical laboratory will be presented.

12:30 p.m. Lunch—Faculty Dining Room, Des Peres Hall, West Pine and Spring Aves.
2:00 p.m. Tour of the Pius XII Memorial Library, West Pine and Spring Aves.

SCIENTIFIC SESSION

Tuesday, March 15, 1960

Reception Room 104—Pius XII Memorial Library

Mrs. Bebe Eckardt, St. Joseph, Presiding
Sister M. Carmelita Hovenkotter, Maryville, Alternate

3:00 p.m. College Requirements for Medical Technology, Angelo Lapi, M.D., Pathologist, St. Mary's and St. Margaret's Hospitals, Kansas City.

The objectives of preprofessional education, application to medical technology, special problems, a consideration of trends and future problems will be discussed.

7:30 p.m. Annual Banquet in Honor of Past Presidents, Missouri State Medical Association, Sheraton-Jefferson Hotel.

All the medical technologists are cordially invited to attend. Tickets must be purchased in advance at the Missouri State Medical Association Registration desk.

SCIENTIFIC SESSION

Wednesday, March 16, 1960—Room 1

Frances Wolfskill, Kansas City, Presiding
Mrs. Ruth Branson, Springfield, Alternate

9:00 a.m. Laboratory Aids in the Diagnosis of Virus Infections, John W. Berry, M.D., F.A.C.P., Instructor in Medicine, Washington University, Director of the Virus Laboratory, St. Louis City Hospital.

Three years experience with tissue culture methods of virus identification will be summarized. In addition, a résumé of other methods currently available in the virus laboratory to help the clinician in establishing diagnosis will be presented.

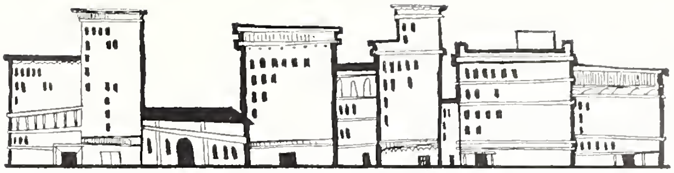
9:30 a.m. The Role of Coagulase Negative Staphylococci in the Production of Disease in the Newborn, Leonard Laskowski, Ph.D., St. Louis University School of Medicine.
10:00 a.m. Coffee Break.
10:15 a.m. Visit Exhibits.
10:30 a.m. Uses and Abuses of Blood Transfusions, Virgil Loeb, Jr., M.D., Assistant Professor of Clinical Medicine, Washington University and Director of Laboratories, Barnes Hospital, St. Louis.

This paper will deal with current concepts of the indications and contraindications for the use of blood in medical practice. Emphasis will be placed upon proper selection of blood components for transfusion therapy.

11:00 a.m. What Does a Low Hemoglobin Mean?, R. O. Muether, M.D., Director of the Clinical Laboratories, St. Louis County Hospital, St. Louis.
11:30 a.m. Serum Iron Determination, Mrs. Regina Lotven, B.S., M.T. (ASCP), St. John's Hospital, Springfield.

This paper describes a simple procedure for iron determination—the method of Peters, modified. It is an improved method based on the Borkan and Walker procedure. It has the advantage of great simplicity, sensitivity and precision. It produces valid and reproducible results.

From the Medical Schools



SAINT LOUIS UNIVERSITY

Genetics Film Series

The premiere of a one semester college course of 48 films entitled "Principles of Genetics" featuring 15 distinguished geneticists may be viewed by interested physicians over educational station KETC-TV in Saint Louis and at Saint Louis University beginning February 8, it has been announced by Dr. John D. Dwyer, director of the Department of Biology at the University and Mr. Henry F. Chadeayne, executive director of the Saint Louis Educational Television Committee.

The course, designed for college credit, marks the first of its kind in the biological sciences to be given by a representative group of world specialists in the field. It is to be distributed nationally and internationally following its 12-week showing in Saint Louis.

The films will be shown on KETC-TV, Channel 9, from 8:00 to 8:30 a.m. on Tuesday, Wednesday and Thursday mornings and from 8:30 to 9:00 p.m. on Monday, Wednesday and Thursday evenings.

The genetics course will be a part of the University's regular biology major program and offers three regular college credits. Students seeking to earn credit at the University will have the opportunity of viewing the films not only on TV at home, but also on three days per week during daytime study at the University. Students who are not enrolled in the University as full-time students will be designated as "television students" and will be expected to attend nine Saturday morning sessions for the entire semester.

Three of the geneticists featured on the film series are Nobel Prize award winners. They are: Dr. George W. Beadle, chairman of the Division of Biology, California Institute of Technology; Dr. Hermann J. Muller, distinguished service professor of zoology, Indiana University, and Dr. Joshua Lederberg, professor of medical genetics, Stanford University.

Saint Louis University and KETC-TV's pioneering efforts in the film project were largely due to the generosity of the Fund for the Advancement of Education established by the Ford Foundation which awarded a grant to expedite the academic phase of the production. The McGraw-Hill Book Company of New York has underwritten the cost of preparing the film and is publishing Dr. Herskowitz' companion workbook and the recommended textbook, "Principles of Genetics" by Sinnott, Dunn and Dobzansky. Physicians interested in taking the course for credit are asked to contact Dr. John D. Dwyer, director of the Department of Biology.

Grant Awards

The United States Public Health Service has awarded the St. Louis University School of Medicine continuation and new research and training grants totaling $361,761 it has been announced by Dr. James W. Colbert, Jr., Dean. The amount represents awards made during the months of September, October and November.

Research grants awarded to the School total $180,357, while training grants are in the amount of $181,404. Largest new training grant was awarded to Dr. Edward A. Doisy, director of the Department of Biochemistry. Dr. Doisy was awarded an annual sum of $41,744 for the support and expansion of postgraduate study in the field of biochemistry. The award, which was issued for three years and nine months will total $160,000 for the overall period. It will provide additional traineeships and supplement the stipends of the current trainees in the Department of Biochemistry. The purpose of the expanded training program is to offer training in research and teaching in biochemistry for graduate students, so that ofter completion of their studies they will be prepared to contribute to the advancement of medical seicnee.

Other postgraduate training grant awards to medical faculty were as follow: Dr. Dermott Smith, assistant professor of neurology and psychiatry and assistant dean, $33,072 for the support of training in psychiatric studies; Dr. Rene Wegria, director of the Department of Internal Medicine, $25,000 for the support of graduate studies on the heart and $9,900 for graduate training in diabetes; Dr. Jack Zuckner, assistant professor of clinical medicine, $9,504 for graduate training in arthritis for the purpose of training personnel in the field of rheumatic diseases; Dr. Robert K. Mack, assistant professor of internal medicine, $16,740 for the training of graduate physicians in the basic aspects of the use of radioisotopes in clinical medicine; Dr. Vallee L. Willman, assistant professor of surgery, $25,000 for the coordination of cancer research, cancer therapy and cancer education so that medical students receive a broad introduction into all aspects of the cancer problem as well as detailed information relative to practical management; Dr. C. Rollins Hanlon, director of the Department of Surgery, $11,944 for the support of research activities of individuals receiving training in cardiac surgery and Dr. Daniel Mullally, assistant in microbiology, an $8,500 traineeship award for research studies under the direction of Dr. R. Walter Schlesinger, director of the Department of Microbiology.

Research grants included a new award of $10,723 to Dr. Morton M. Weber, assistant professor of microbiology for the study of the possible role of vitamin K as an intermediate in the transport of cellular energy. Grant renewals and recipients were as follows: Dr. Elizah Adams, director of the Department of Pharmacology, $13,915, for amino-acid metabolism investigations; Dr. Goronowy O. Broun, professor of internal medicine, $17,351 for a study of factors in invasion of the brain by encephalitis viruses; Dr. Irving A. Coret, assistant professor of pharmacology, $13,800 for research into responses of muscle to chemical agents and to light; Dr. George L. Curran, associate professor of internal medicine, $7,544 for studies in cholesterol metabolism as related to hardening of the arteries; Dr. Florent E. Franks, associate professor of physiology, $4,123 for research into the innervation of the nasal blood vessels; Dr. Alrick B. Hertzman, director of the Department of Physiology, $16,014 for studies on the nasal blood vessels; Dr. Ralph A. Kinsella, Jr., associate professor of internal medicine, $20,500 for studies of the metabolism of hormones of newborn babies; Dr. Maurice Green, assistant professor of microbiology, $12,650 for studies in the biochemistry of animal virus multiplication; Dr. Karl G. Lark, assistant professor of microbiology, $15,525 for research on normal and abnormal growth of bacteria; Dr. Henry Pinkerton, director of the Department of Pathology, $2,098 for a research investigation on salivary gland virus infections in rodents; Dr. R. Walter Schlesinger, director of the Department of Microbiology, an award of $28,750, for continuation of studies on latent virus infections of human tissues; Dr. C. Rollins Hanlon, director of the Department of Surgery, two awards totaling $12,650 for studies of cardiac function following open heart surgery and for investigation on the metabolism of the heart and Dr. Harold Segal, assistant professor of pharmacology, $4,714 for studies of chemical pathways by which sulfate groups are introduced into biochemical compounds.

Basic research on the part played by protein in the multiplication of viruses will be supported at the School of Medicine with a new March of Dimes grant of $15,737 from the National Foundation. The work will be directed by Dr. Norman E. Melechen, assistant professor of microbiology.

In his work Dr. Melechen and his associates are using bacteriophage, a type of virus that attacks bacteria. This virus, like most others, is made up of nucleic acid and protein. When it invades a bacterium, most of the protein portion is left behind, the nucleic acid portion enters the bacterial cell and directs the cell's machinery to produce new particles of virus. In the process, the bacterial cell is ruptured, releasing the new virus which can then invade other bacteria.

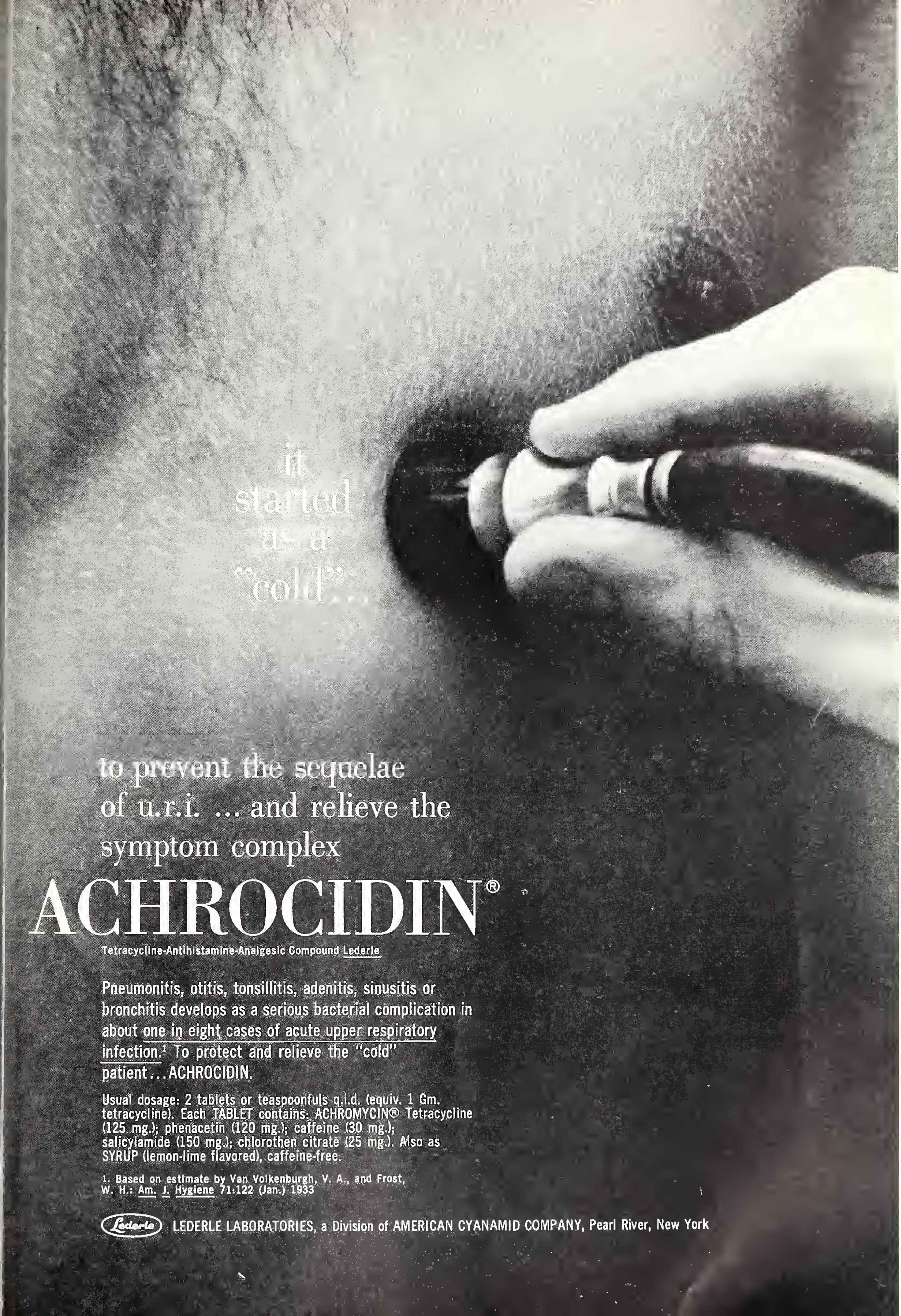
This much is known, but the details of how virus is reproduced in the cell are largely unknown. Dr. Melechen is particularly concerned with determining whether the reproduction of virus is due entirely to its nucleic acid or whether its protein also plays a part. He has found that when virus enters bacterial cell, a small amount of protein is formed first which is essential to the virus production. Dr. Melechen will attempt to find the nature and the precise role of the protein formed early in virus infection.

Highroad to Health

A 13-week series of radio programs highlighting the role of the physician in guarding family health was begun early in December by the American Broadcasting Company. Called "Highroad to Health," the series is under the supervision of the AMA and is being presented by ABC in cooperation with Lederle Laboratories.

Each program opens with a nine-minute dramatization of a health problem, followed by a five-minute discussion of the problem by a guest physician. Subjects include hypertension, cancer, geriatrics, mental health, surgery, household accidents and a number of other common problems.

ABC affiliates in Missouri are stations KFRU, Columbia; KMBC, Kansas City; KIRX, Kirksville; WAMV, St. Louis, and KWTO, Springfield. "Highroad to Health" is available to these stations on Wednesdays at 2:15 p.m. or Saturdays at 10:30 a.m. Local newspaper program listings



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[1] Based on estimate by Van Volkenburgh, V. A., and Frost, W. H.: Am. J. Hygiene 71:122 (Jan.) 1933

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or the stations should be consulted for exact broadcast schedules.

UNIVERSITY OF MISSOURI

Meetings and Talks

On December 10, the Medical History Group heard David H. Pinkney, professor of history at the University of Missouri, speak on "Water, Sewers and Sanitation in Paris a Hundred Years Ago."

A reception honoring Dean and Mrs. Vernon E. Wilson was held Sunday, December 13, in the Student Lounge of the Medical Sciences Building. The sponsoring groups were the Missouri Student American Medical Association and the Student Nurses' Association. Dean and Mrs. Wilson; Arthur Trask, president of the Missouri Student American Medical Association; and Miss Doris Asselmeier, president of the Student Nurses' Association, received the guests, who included medical and nursing students, their wives and husbands; Associate Dean and Mrs. Lodwick; Assistant Dean and Mrs. Engley; the director of the School of Nursing, Miss Ruby Potter, and assistant director, Miss Jane Brinton.

Trips

Several faculty members of the School of Medicine attended the meetings of the Southern Medical Association held in Atlanta, Georgia, November 16-19, 1959. Among those attending were Dr. Jacob Roden, professor and chairman of the Department of Obstetrics-Gynecology; Dr. M. Pinson Neal, professor emeritus of pathology, who also attended the annual meeting of the College of American Pathologists, which was also held in Atlanta during this period; Dr. Kenneth Keown, professor of anesthesiology, who presented "The Choice of Agents for Spinal Anesthesia," and Dr. Clement E. Brooke, associate professor of pediatrics, who spoke on "Visceral Larva Migrans."

Dr. Herbert E. Brown, assistant professor of anatomy, attended the meetings of the American Society of Hematology held November 22-24 in St. Louis.

On December 8, a meeting sponsored by the American Chemical Society, was held at the Student Union at the University of Missouri. This was the 50th anniversary of the Missouri Section of the American Chemical Society. Activities included a social hour honoring alumni and a banquet followed by a lecture given by Charles N. Kimball, president of Midwest Institute, Kansas City, Missouri. The topic was "The Development of Science as an Economic Factor in the Growth of the Midwest." Dr. T. D. Luckey, professor and chairman of the Department of Biochemistry, presided as chairman of the section, and Dr. Owen J. Koeppe, associate professor of biochemistry is secretary-treasurer for the Society. Dr. Luckey attended a meeting held December 10 in Parker Hall at the University and sponsored by the American Association of University Professors. Discussed at the meeting were the extra university sources of research money available to University faculty, which included private foundation, industrial and government agencies.

On December 5 several members of the Department of Microbiology attended the meeting of the Eastern Missouri Branch of the Society of American Bacteriologists held in St. Louis. Dr. Frank B. Engley, professor and chairman of the Department, served as president and convener. R. T. Evans, graduate assistant, presented a paper with Dr. Engley entitled "Studies of Hospital Air." Dr. James T. Barrett, associate professor of microbiology, was elected to the office of secretary-treasurer and was also coauthor of a paper entitled "Haptene Induced Leukocyte Agglutination" with Miss Mary Rigney, a graduate student. Dr. Herbert S. Goldberg, associate professor of microbiology, also attended the meeting and was coauthor of a paper on "A Skin Test for Leptospirosis" presented by Dr. Kuppaswany and a paper on "Histopathology of Newcastle's Virus in Hela Cells" presented by Dr. Das of the Department of Microbiology. Also attending the meeting was D. P. Durand, assistant professor of microbiology. Dr. Goldberg attended a Leptospirosis Research Conference in Chicago on November 28-29 during which time he participated in a discussion on leptospirosis research. D. P. Durand and Dr. Clement Brooke, associate professor of pediatrics, attended a meeting at Moberly Woodland Hospital on December 10, where they participated in a discussion on recent advances in Virology.

Dr. Jacob Roden, professor and chairman of the Department of Obstetrics and Gynecology, attended a series of meetings sponsored by the Southern Gynecological and Obstetrical Society on November 15-16 in Atlanta, Georgia.

Dr. Joseph E. Flynn, professor and chairman of the Department of Pathology, attended a meeting of the Medical Advisory Committee of the Leukemia Guild in St. Louis on December 3.

Payne H. Percefull, administrative assistant, Central Pathology Lab, attended a five day course, which consisted of a classroom and laboratory work shop on Automatic Analytical

Chemistry by use of the autoanalyzer. The sponsoring group for the course was the Technicon Instrument Company, and was held in Chauncy, New York, December 7-11. The course also covered the operation, adjustment and maintenance of the Technicon autoanalyzer.

Dr. Rodman Kabrick, assistant professor of clinical psychology, participated in a meeting of the Boone County Child Welfare Advisory Committee on December 12 in the Daniel Boone Hotel in Columbia.

Dr. Thelma Trombly, assistant professor of speech and hearing, discussed recent research on cleft palate speech and surgical repairs most conducive to good speech at a meeting sponsored by the St. Louis University Speech Clinic on December 4. On December 12, Dr. Trombly conducted an examination of children's speech at public schools in Arnold, Missouri. Following the examination, Dr. Trombly conferred with the parents and teachers.

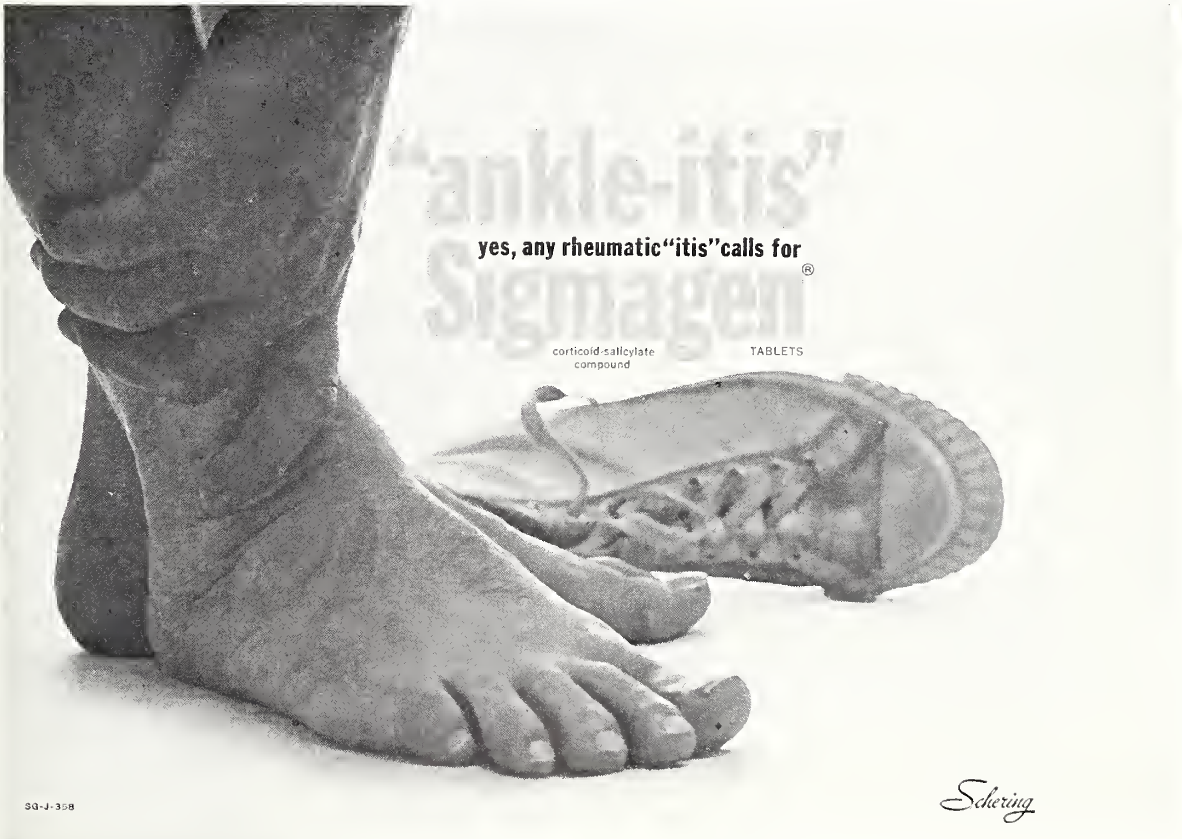
On November 19, Dr. Hugh E. Stephenson, professor and chairman of the Department of Surgery, spoke at a meeting of the West Boulevard School P.T.A. on "Choosing a Career." On December 2, Dr. Stephenson presented a talk "An Approach to Chronic Venous and Lymphatic Diseases of the Extremities" in connection with a course on Peripheral Vascular Disease, which was sponsored by the St. Louis Medical Society, the course being part of a postgraduate medical study.

Dr. John Buesseler, associate professor of ophthalmology, and Dr. Howard Strauss, assistant instructor in ophthalmology, attended the meeting of the Ophthalmological Society in St. Louis on November 19. Dr. Buesseler attended a dinner meeting at the Delta Gamma Sorority house at the University and gave a talk on "The Eyes" on December 3.

Dr. Ian Thompson, associate professor of urology, attended the Detroit Urological Society meeting in Detroit on November 27. Dr. Thompson also attended the Buchanan County Medical Society meeting for urologists in St. Joseph on December 9.

Dr. Carl H. Almond, assistant professor of surgery, spoke to the Postgraduate Medical Study Group of the St. Louis Medical Society of Peripheral Vascular Diseases on "The Role of Surgical Sympathectomy in the Treatment of Peripheral Vascular Diseases," on November 18.

Dr. John H. Landor, assistant professor of surgery, attended meetings of the Medical Educa-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tion for National Defense (MEND) Program in Washington, D. C., December 14-17.

A recent guest in the Department of Surgery was Dr. J. William Hinton, professor and chairman of the Department of Surgery at New York University Postgraduate Medical School. During his visit, Dr. Hinton conducted Guest Grand Rounds for the medical students, surgical residents, faculty and doctors in the neighboring communities. He specifically discussed problem surgical cases and their management.

Dr. Kenneth K. Keown, professor of anesthesiology, attended a meeting sponsored by the American Board of Anesthesiology, Inc. in New York City on December 8. Directors and persons interested in residency training programs attended the meeting.

Gifts and Grants

Project director for a grant of $3,300 from the Missouri Heart Association and the Kansas City Heart Association, will be Dr. Frank B. Engley, professor and chairman of the Department of Microbiology. This will provide for "Studies of the Toxicity of Microbial Toxins and Metabolites on Heart Tissue."

Dr. Owen J. Koeppe, associate professor of biochemistry, has been named project director of a grant in the amount of $5,175 from the Public Health Service for research in "The Biosynthesis of Peptide Bonds-Carnosine."

A grant in the amount of $3,600 has been awarded by the Missouri Heart Association and the Kansas City Heart Association to Dr. J. Martt, associate professor of medicine, for "Studies of the Effects of Nicotinic Acid on Serum Cholesterol, Fat Tolerance and the Ballistocardiogram."

Dr. James E. Randall, associate professor of physiology and biophysics, has been awarded a supplemental grant of $12,375 from the U. S. Public Health Service in connection with his research on the physics of pulsatile blood flow.

Dr. Constantine Anast, assistant professor of pediatrics, has been named project director of a grant for $5,346 from the Missouri Heart Association and the Kansas City Heart Association for further "Studies on the Effects of Low Serum Magnesium Levels on the Electrocardiogram."

New Appointments

Dr. Ezra R. Singer has been appointed assistant instructor and second year resident in sur-

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gery effective July 1, 1960. Dr. Singer received his B.S. in 1955 from Yale University and his M.D. in 1958 from the University of Chicago Medical School. He is presently a junior assistant resident at the University of Chicago.

Dr. Jefferson C. Davis, Jr., has been appointed assistant instructor and first year resident in surgery effective July 1, 1960. Dr. Davis received his B.S. in 1953 and M.D. in 1957, both from the University of Missouri. He is presently with the U. S. Air Force Medical Corps, Ellsworth AFB, South Dakota.

Preceptorships in General Practice

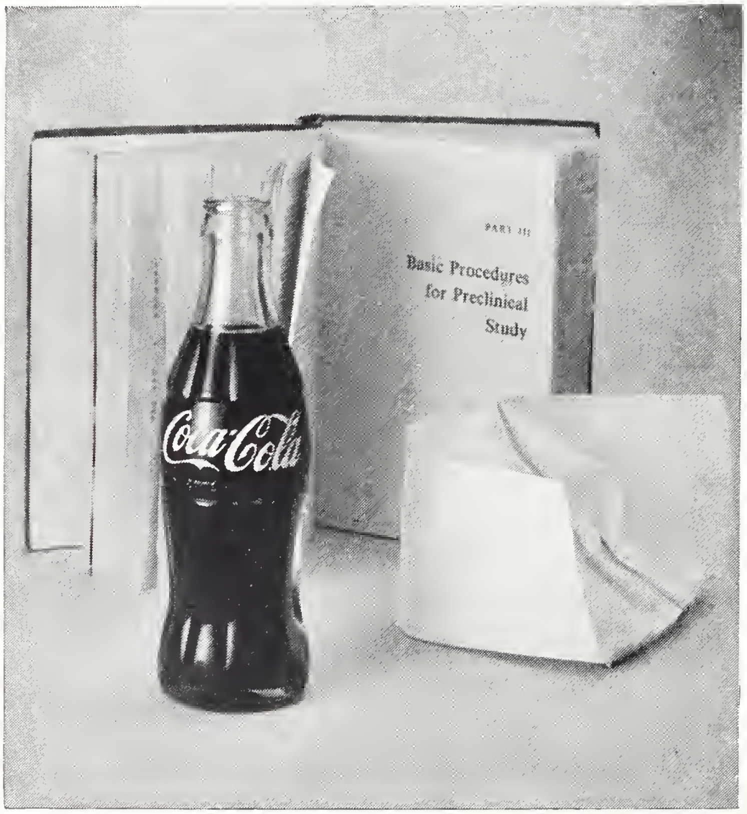
The first group of fourth year medical students who have elected to serve a Preceptorship in General Practice were assigned to the following physicians in the State of Missouri and served as preceptees for the period of December 4 to January 15, 1960: Preceptor, Dr. Kenyon Latham, California, Catherine Dunstan Boydston, Eldson, and W. Wayne Boydston, Trimble; Dr. Doyle McGraw, Bolivar, John Holcomb, Cape Girardeau; Dr. John P. Mabray, Plattsburg, Stanton Hardy, Farmington; Dr. R. Smith, Marceline, Glen Gardner, Kansas City.

These physicians who serve as preceptors are selected by the Committee on Medical Education and Hospitals of the Missouri State Medical Association and if they are willing to serve, are appointed by the Board of Curators of the University of Missouri as Preceptors in General Practice. The student assigned to them is under their direct supervision for the period of the assignment and will be graded by them for their performance during that period. Other groups of students will be assigned to Preceptors for the following periods: January 16 through February 28; February 29 through April 11; April 12 through May 25.

WASHINGTON UNIVERSITY

Awards

Dr. Eli Robins, professor of psychiatry at Washington University School of Medicine, has been awarded a $25,273 new research grant by the National Foundation for studies of the chemistry of the brain. The grant, which was made possible by public contributions to the New March of Dimes, became effective January 1. Dr. Robins is attempting to discover the precise chemical differences between nerve cells susceptible to invasion by poliovirus and those



When too many tasks
seem to crowd
the unyielding hours,
a welcome
"pause that refreshes"
with ice-cold Coca-Cola
often puts things
into manageable order.

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which appear to resist the virus. Findings from the investigations may not only contribute information useful in combatting virus disease, but are expected to add to general understanding of human brain. The National Foundation has recently expanded its program beyond polio and is now combatting other crippling diseases, including birth defects and arthritis.

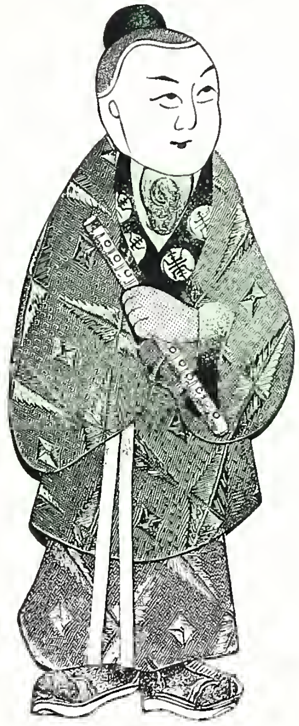
Dr. Herman N. Eisen, professor of medicine, in dermatology, has been awarded an $8,400 grant from the National Science Foundation, Dean Edward W. Dempsey has announced. Funds will be used to support a series of conferences which will deal with the structures of antibodies and means by which antibody molecules are synthesized by cells. The continuing workshop will be attended by staff members in the Department of Internal Medicine.

The Washington University School of Medicine has been awarded a $575,000 grant by the United States Public Health Service for a five-year study of glaucoma. The grant was given to the school's Department of Ophthalmology. Washington University is one of four research institutions which will receive $115,000 annually for five years for the study. The others are Wilmer Institute at Johns Hopkins University Hospital in Baltimore; Moffitt Eye Hospital at the University of California Medical School in San Francisco, and the Department of Ophthalmology at the State University of Iowa, Iowa City. In announcing the program, United States Surgeon General Leroy E. Burney said the eyesight of thousands of persons might be saved each year if means were available to detect the presence of glaucoma in time. The five-year study has four objectives, Dr. Burney said. They are: Finding a way to define glaucoma at its earliest clinical stages; developing methods for detecting glaucoma earlier; relating measureable eye abnormalities to glaucoma, and evaluating the efficiency of present diagnostic technics.

The United States Public Health Service also awarded a new research grant of $23,795 to Dr. David M. Geller in the Department of Pharmacology for a study of photophosphorylation in biological systems, and a new grant of $1,756 to Dr. William R. Cole in the Department of Surgery for a study of postoperative staphylococcal infection.

Dr. Virgil Loeb, Jr., assistant professor of clinical medicine and of pathology, received a $14,556 renewal research grant; Dr. T. E. Weichselbaum, associate professor of experimental surgery, $12,844; Dr. Bernard Wortman, research instructor in ophthalmology, $9,600; and Dr. George R. Drysdale, assistant professor of bio-

immortals of chinese mythology:



Han Hsiang-tzu

This nature-loving physician achieved immortality by falling out of a tree

TODAY..

this trail-blazing steroid is achieving lasting recognition by its unsurpassed record of accomplishment

METICORTEN

METICORTEN,® brand of prednisone, 5 mg. tablets.

SCHERING CORPORATION • BLOOMFIELD, NEW JERSEY

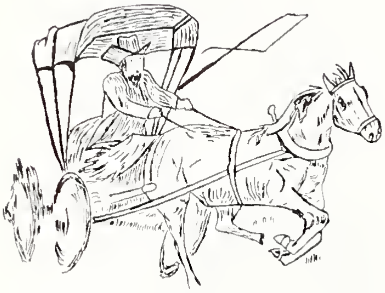
You will soon receive in your mail a handmade, full-color, three-dimensional figure of this Chinese Immortal, mounted and suitable for framing.

S-348B

Schering

LEO H. POLLOCK, M.D.

Missouri Medicine in Review



FORTY YEARS AGO

Sedalia has voted to erect a $100,000 city hall and a $10,000 hospital for Negroes.

Dr. DeLamater, health officer of St. Joseph, says the city had fewer cases of contagious disease in December than ever before recorded in that month.

Missouri University students and alumni are contributing funds for a tower to cost $500,000 as a memorial to the students and the alumni who served in the world war.

Clinton County Medical Society has raised its annual dues to $5.00; Greene County Medical Society has raised its annual dues to $6.00, and Jackson County Medical Society has raised its annual dues to $12.00.

The Virginia Medical Association has increased the annual state assessment from $2.00 to $4.00 and has purchased the *Virginia Medical Monthly* which will be the official organ of the association and carry only ethical advertisements.

The Marine Hospital at St. Louis has outgrown its facilities to care for sick soldiers, sailors, and marines, according to the published statement of city officials, and they have made an effort to induce the United States Public Health Service to introduce a bill in Congress providing for an appropriation of $1,500,000 to construct and equip a new marine hospital in St. Louis.

Dr. Simon Flexner, who is in charge of the Medical Research Bureau of the Rockefeller Institute, was a guest of the St. Louis Medical Society at a reception and dinner given at the University Club on Jan. 2, 1920, when he delivered an informal talk on the improved outlook of medical education and medical science. He mentioned the recent contribution from Mr. Rockefeller of $20,000,000 and the separate sum of $5,000,000 for the Vanderbilt University as portentous of quite large sums from other sources in the near future.

TWENTY-FIVE YEARS AGO

Dr. Fred W. Bailey, St. Louis, has been appointed by Governor Park a member of the Missouri State Board of Health to succeed Dr. Emmett P. North, St. Louis.

A testimonial dinner was tendered Dr. John

Medical Schools—Continued

logical chemistry, $7,150. A $12,000 supplemental grant was awarded Dr. Edward F. Gildea, professor and head of the Department of Psychiatry and Neurology, for the graduate training program in psychiatry.

A renewal training grant of $5,184 was received by the School of Medicine for medical student part-time research fellowships.

Lecturer

Dr. Edmund V. Cowdry, director of the Wernse Cancer Laboratory at Washington University School of Medicine, discussed "The Promise of Geriatrics" at the Medical College of Georgia, Augusta, in December. The lecture was sponsored by Alpha Omega Alpha, national honorary medical fraternity. Dr. Cowdry also recently returned from Chicago, where he awarded a citation to Dr. Selman Waksman at the Second Annual Salute to Medical Research dinner. Dr. Waksman, emeritus director of the Institute of Microbiology, Rutgers University, and a Nobel Prize winner, received the award for his discovery of streptomycin. The dinner is sponsored by the Chicago Business and Professional Men's Chapter of the City of Hope, National Medical Center. Also receiving awards were Dr. George Beadle, California Institute of Technology, and Dr. Edward L. Tatum, Rockefeller Institute, both Nobel Prize winners, for their contributions to the mechanisms of genetics; Mrs. Mary Lasker, president of Lasker Foundation, for medical leadership and philanthropy; and Dr. Steven O. Schwartz, Hektoen Institute, for his work in leukemia and blood diseases.

Marvelous low-residue meal—consommé, molded flaked fish, farina-plum pudding—and beer!

The secret of a successful low-residue diet is acceptance

And what could be more acceptable to the patient who's tired of his low-residue diet than some truly appetizing dishes?

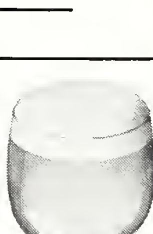
Consommé is delicious served jellied or hot. Eggs can be soft or hard-cooked by simmering. Flaked fish molded in lemon gelatin looks inviting.

For delicious "burgers," just moisten chopped beef with broth and mix in bread crumbs. Puréed vegetables, folded into well-beaten eggs (yolks and whites) and baked, make miniature "soufflés."

For a salad try split bananas over cottage cheese, top with puréed apricots. To make a parfait—alternate layers of farina pudding and puréed plums. Rice cooked in pineapple juice, water and sugar makes a golden dessert.

United States Brewers Foundation

If you'd like extra reprints of this advertisement, write United States Brewers Foundation, 535 Fifth Avenue, N. Y. 17, N. Y.



And with your approval, your patient might add a glass of beer to round off his meal.

pH-4.3, 104 Cal./8 oz. glass
(Average of American Beers)

C. Morfit, St. Louis, past president of the St. Louis Medical Society, on January 24.

The Kansas City Pathological Society was organized at a meeting of Kansas City pathologists on December 12, 1934. All physicians interested in pathology will be admitted.

Dr. Lewis Stephen Pilcher, Upper Montclair, N. J., scholar and editor for half a century of the oldest surgical journal in the United States, the *Annuals of Surgery*, died December 24, aged 89.

Ninety-three counties containing nearly 40 per cent of the population of the state are without hospitals of 25 bed capacity or more. Four general hospitals in Missouri are developing special tumor services along the lines recommended by the American College of Surgeons. Menorah Hospital in Kansas City has deep therapy and radium and four beds subsidized for the treatment of indigent cancer patients. In Barnes Hospital, St. Louis, a tumor service is functioning in the surgical department and in the Washington University Clinic, there is an organized tumor service in the department of gynecology. In DePaul Hospital, St. Louis, plans are developing for a tumor service to meet the needs of that institution. In City Hospital No. 1, St. Louis, an effort is being made to have tumor patients seen by two or three staff members before therapy is undertaken.

TEN YEARS AGO

The Carter-Shannon County Medical Society met at the office of Dr. T. W. Cotton, Van Buren, with the following present: Drs. Cotton; R. I. Davis, Birch Tree; Harry Rollins, Winona, and W. T. Eudy, Eminence.

The Ste. Genevieve County Medical Society held its annual meeting in Ste. Genevieve on Dec. 14. The following officers were elected: President, Dr. A. E. Sexauer; vice president, Dr. C. J. Clapsaddle, and secretary and treasurer.

The following members were made fellows and associate fellows of the United States Chapter, International College of Surgeons, at the 14th annual meeting in Atlantic City, Nov. 7 to 11: Drs. W. A. Bloom, Fayette; Karl D. Dietrich, Columbia; Winfred L. Post, Joplin; Vincent A. Schneider, St. Charles; Horace Arch Lowe and Walter R. Langston, Springfield; Philip H. Halperin, Mark M. Marks, O. Jack Printz and Joseph A. Nigro, Kansas City; L. C. Boemer, C. H. Shutt, William H. Sinkler, Leo J. Hartnett, B. L. Sinner, Edgar W. Davis and Rubin Hackmeyer, St. Louis.

Tested . . . and proved . . .

ORAL therapy in diaper rash!

Effective therapy! Thousands of pediatricians and general practitioners prescribe Pedameth for ammonia dermatitis—and they continue to prescribe it. Clinical tests have proved its effectiveness. Pedameth is safe because it contains only dl-methionine (0.2 Gm.) one of the essential amino acids. When Pedameth is administered, the pH of the urine is lowered and an as-yet-unknown anti-bacterial agent appears in the urine. Pedameth works . . . it's the safe, effective, convenient answer to ammoniacal diaper rash.

Convenient . . . simply open a capsule and add the contents to the baby's daily formula, or to fruit juice or water. No lotions . . . no rinses . . . no ointments . . . just oral therapy.

Send for samples and literature.

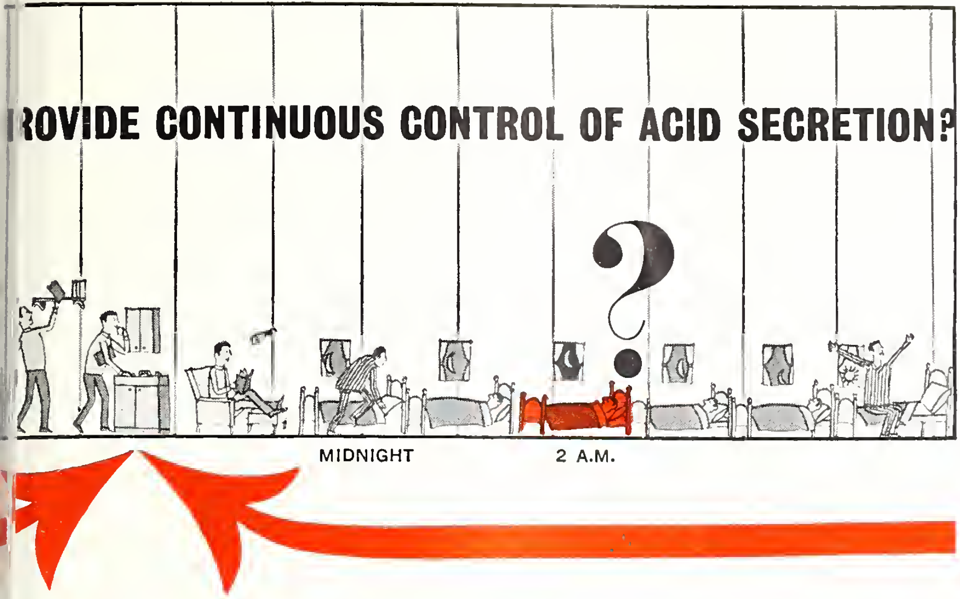
S. F. DURST & CO., INC.
Philadelphia 20, Pa.

Prescribe

PEDAMETH®

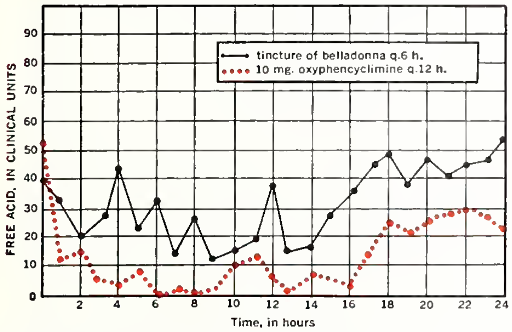
(dl-methionine DURST)

ROVIDE CONTINUOUS CONTROL OF ACID SECRETION?



"Prolonged periods of achlorhydria" after 10 mg. oxyphencyclimine q. 12 h.[3]

MEAN GRAPH OF GASTRIC ACIDITY IN 4 PATIENTS RECEIVING COMPLETE THERAPEUTIC REGIMEN • 24-HOUR STUDY



Clinical Diagnosis: Peptic Ulcer—Gastritis—Gastroenteritis—Colitis—Functional Bowel Syndrome—Duodenitis—Hiatus Hernia (symptomatic)—Irritable Bowel Syndrome—Pylorospasm—Cardiospasm—Biliary Tract Dysfunctions—and Dysmenorrhea.

Clinical Results: Effective in over 92% of cases.

As for Safety: "Side reactions were uncommon, usually no more than dryness of the mouth. . . ."[4]

Each ENARAX tablet contains:

Oxyphencyclimine HCl	10 mg.
Hydroxyzine (ATARAX®)	25 mg.

Dosage: One-half to one tablet twice daily—preferably in the morning and before retiring. The maintenance dose should be adjusted according to therapeutic response. Use with caution in patients with prostatic hypertrophy and with ophthalmological supervision only in glaucoma.

Supplied: In bottles of 60 black-and-white scored tablets.

References: 1. McHardy, G., et al.: J. Louisiana M. Soc. **111**:290 (Aug.) 1959. 2. Steigmann, F.: Study conducted at Cook County Hospital, Chicago, Illinois, in press. 3. Kemp, J. A.: Antibiotic Med. & Clin. Therapy **6**:534 (Sept.) 1959. 4. Leming, B. H., Jr.: Clin. Med. **6**:423 (Mar.) 1959. 5. Data in Roerig Medical Department files.

New York 17, N. Y.
Division, Chas. Pfizer & Co., Inc.
Science for the World's Well-Being™

The C. V. Mosby Company, St. Louis. Booth 7.

New knowledge, new ideas, new research and technic—all are waiting for you in the newest Mosby books for 1959 and 1960. Come in. Look over these books at your leisure and convenience. If you wish his assistance, our experienced representative will be happy to discuss any book with you.

C. W. Alban & Co., St. Louis. Booth 8.

The Purdue Frederick Company, New York. Booth 9.

The Purdue Frederick Company presents: Senakot, constipation corrective, concentrated total senna glycosides which activate Auerbach's plexus, initiates normal neuroperistalsis; Arthropan, new rapidly absorbed choline salicylate, producing anti-inflammatory analgesic, antipyretic effects in a short time without gastric irritation, Paryciden, new triple-action throat medication, for immediate relief—local analgesia, for sustained relief—systemic analgesia, for control of infection—antibacterial action.

Pfizer Laboratories, Brooklyn, N. Y. Booth 10.

The Pfizer Laboratories' display has been specifically arranged for your convenience and to give you the maximum in quick service and product information. To make your visit worthwhile, technically trained Medical Service Representatives are on hand to inform you of the latest developments in Pfizer Research.

Medco Products Co., Tulsa. Booth 12.

Presenting the Medco-Sonlator. Providing a new concept in therapy by combining muscle stimulation and ultra sound simultaneously through a Single Three-Way Sound Applicator. The Medco-Sonlator is a distinct advance in the effectiveness of physical therapy in your office or hospital. A few minutes spent in our booth should prove of value to your practice.

Ciba Pharmaceutical Products, Inc., Summit, N. J. Booth 13.

The Dietene Company, Minneapolis. Booth 14.

Have you tasted Meritene, the Protein-Vitamin-Mineral supplement that does taste good? Visit our booth, enjoy a Meritene milk shake with its multiple nutritive values. While you're there, review the Dietene Diet based on Dietene Reducing Supplement. It provides the rare combination of low calories (1000) with high intake of protein and all essential vitamins and minerals in an interesting, effective, safe weight reducing diet.

Merck Sharp & Dohme, Philadelphia. Booth 15.

The Blue Line Chemical Co., St. Louis. Booth 16.

Holland-Rantos Company, Inc., New York. Booth 17.

The H-R exhibit features: Specific Antimycotic, non-messy HYVA Gentian Violet Vaginal Tablets; Trichomonicidal, fungicidal and bacteriocidal improved Nylmerate Jelly and Antiseptic Solution Concentrate for vaginal trichomoniasis and mixed infections; Hollandes Silicone Ointment with natural vitamins A and D—medication for neuro- and contact dermatitis, decubitus ulcers, diaper rash, skin dryness or chafing; Special Koromex A for use when "jelly alone" is indicated for conception control; contouring Koro-Flex diaphragms (facilitate correct placement), along with standard Koromex jelly, cream, diaphragms and sets.

Donley-Evans & Company, St. Louis. Booth 18.

Lipo-Triazine & Lipe-Diazine—the most active, least toxic sulfas, representing a new principle in oral sulfonamide therapy made possible by the use of a nontoxic lipoid vehicle. Sustained therapeutic sulfa blood levels are produced with only twice a day dosage. They produce higher blood levels with the same amount or less total sulfa intake.

Dairy Council of St. Louis, St. Louis. Booth 19.

Diamond Laboratories Co., Des Moines. Booth 20.

Diamond Laboratories are displaying and detailing a basically new antacid named "Neo-Gel." Neo-Gel does not contain aluminum hydroxide. Neo-Gel is a new colloidal form of tribasic Calcium Phosphate. Also, a new oral form of complexed iron, which is tasteless and high iron content per cc.

Sandoz Pharmaceuticals, Hanover, N. J. Booth 21.

Sandoz Pharmaceuticals is displaying: Mellaril, the first potent tranquilizer with a selective action (i.e., no action on vomiting centers). This unique action gives specific psychic relaxation with safety at all dosage levels. Plexonal, preferred daytime sedative—relaxant. Superior to both the barbiturates and meprobamates. Cavergot PB, the most effective oral medication for the relief of migraine headache with gastrointestinal disturbance accompanied by tension.

Professional Management Midwest, Kansas City. Booth 22.

Our representatives will be pleased to have you visit our booth and discuss your business problems with us. This year, Professional Management Midwest starts its sixteenth year of service to Midwestern Doctors. That service has meant ease of practice and a larger net income to hundreds of Doctors, why not you?

DESITIN CHEMICAL CO., PROVIDENCE, R. I. BOOTH 23.

Desitin Ointment, for treatment of burns, ulcers, diaper rash, abrasions; Desitin Powder, relieves chafing sunburn, diaper rash; Desitin Suppositories and Rectal Ointment, relieve pain and itching in uncomplicated hemorrhoids, fissures; Desitin Baby Lotion, protective, antiseptic; Desitin Acne Cream, a nonstaining, flesh-tinted "Medicream" for the treatment of acne vulgaris; Desitin Cosmetic and Nursery Soap, supermild; Desitin Suppositories with Hydrocortisone, prompt response to inflammatory conditions, in proctitis, severe pruritus, edema.

ROCHE LABORATORIES, NUTLEY, N. J. BOOTH 24.

You are cordially invited to visit the Roche booth where our medical representatives will provide you with the latest information and literature on our products. Featured are Madribon and Tigan.

BORCHERDT CO., CHICAGO. BOOTH 25.

Two time-tested products are being shown at this meeting: Malt Soup Extract for constipation and intractable pruritus ani. This dietary product acts on the intestinal flora to produce a predominantly aciduric flora. Utolitia is a mild, soothing urinary antiseptic for geriatric patients. Register for samples and information on these products.

J. E. HANGER INC., OF MISSOURI, ST. LOUIS. BOOTH 26.

Modern prosthetic devices, for upper and lower extremity amputees, are displayed by the Hanger organization, who offer a complete service to the amputee. A represedative is on hand to show these prostheses together with the many recent improvements for both upper and lower extremity amputees.

KNOLL PHARMACEUTICAL CO., ORANGE, N. J. BOOTH 27.

ST. LOUIS PHYSICIANS SUPPLY CO., ST. LOUIS. BOOTH 29.

The St. Louis Physicians Supply Co. exhibits, against a backdrop showing its manufacturing plant, various of its products of interest to the physician. Representatives will welcome the opportunity to talk with physicians attending the session. Catalogs, literature and samples are available.

MEAD JOHNSON & COMPANY, EVANSVILLE, IND. BOOTH 30.

The Mead Johnson exhibit has been arranged to give you the optimum in quick service and product information. To make your visit productive, specially trained representatives are on duty to tell you about their products.

MILEX PROFESSIONAL SPECIALTIES, PEORIA, ILL. BOOTH 31.

Milex Products display a complete line of Gynesic Specialties featuring such items as our Manually Spaceable Plastic Folding Pessaries, Inflato Ball pessaries, and instruments for uterine cancer detection. Books on the Menopause, Teenage Problems and our Marital Guide are also shown.

ELI LILLY AND COMPANY, INDIANAPOLIS, IND. BOOTH 32.

You are cordially invited to visit the Lilly exhibit located in space No. 32. The Lilly sales people in attendance welcome your questions about Lilly products and recent therapeutic developments.

WINTHROP LABORATORIES, NEW YORK. BOOTH 33.

Winthrop Laboratories cordially invites you to visit our booth, in which we are featuring: Trancopal, the first true "tranquilaxant"—a potent muscle relaxant and effective tranquilizer. Trancopal is used for low back pain and other musculoskeletal disorders, anxiety and tension states, dysmenorrhea, premenstrual tension, etc. It combines an unusually high rate of clinical effectiveness with low toxicity; side effects are less than 3 per cent. Available in two strengths: 100 mg. Caplets (peach) and 200 mg. Caplets (green). Average adult dose, 100 or 200 mg. three or four times daily.

LEDERLE LABORATORIES, PEARL RIVER, N. Y. BOOTH 34.

You are cordially invited to visit the Lederle booth where our medical representatives will be in attendance to provide the latest information and literature available on our line.

JULIUS SCHMID, INC., NEW YORK. BOOTH 35.

FLINT-EATON & COMPANY, DECATUR, ILL. BOOTH 36.

W. H. HOPMEIR, INC., ST. LOUIS. BOOTH 37.

ABBOTT LABORATORIES, NORTH CHICAGO, ILL. BOOTH 38.

The Abbott Laboratories exhibit features the Antibiotic Trian—three products which together provide control of all coccal infections: Erythrocin® Stearate for control of staph-, strep- and pneumococci; Compocillin®-VK against penicillin-sensitive organisms; and Spontin® for the serious coccal infections that hospitalize the patient. Also exhibited are two products now available in Abbott's unique new "metered release" dose form—Trial Gradumate® and Desoxyn Gradumate® plus a selection of other Abbott specialties.

STANDARD PROCESS LABORATORIES, MILWAUKEE. BOOTH 39.

THE COCA-COLA COMPANY, ATLANTA, GA., AND ST. LOUIS. BOOTH 40.

Ice-cold Coca-Cola served through the courtesy and cooperation of the Coca-Cola Bottling Company of St. Louis and The Coca-Cola Company.

S. J. Tutag & Co., Detroit, Mich. Booth 41.

S. J. Tutag & Company is introducing the new tranquilizer—Sonazar Tablets. Sonazar is a unique combination of proven relaxants and sedative like drugs plus Tulyn for fast—safe—predictable tranquilizing action without undesirable side effects. You are cordially invited to stop and visit at Booth 41 and get the full information regarding Sonazar and receive a memento of the convention.

Smith Kline and French Laboratories, Philadelphia. Booth 42.

S. K. F. features (1) "Fortespan" capsules (NEW), high potency multivitamins—therapeutic formula—in Spansule® sustained release capsules; (2) "Eskatrol" Spansule capsules (NEW), the tranquilizer-anorexigenic preparation that curbs the appetite, relieves the underlying psychic stress, and imparts a sense of well-being in psychogenic overweight; and (3) Stelazine® Tablets, the unique tranquilizer to relieve anxiety whether expressed as agitation and tension, or as apathy, listlessness and emotional fatigue.

Hamilton-Schmidt Surgical Co., St. Louis. Booth 43.

King Merritt & Co., Jefferson City. Booth 44.

King Merritt & Co. is one of the largest brokerage firms in America specializing in Mutual Funds and Estate Planning.

Carnation Company, Los Angeles. Booth 45.

Carnation Company cordially invites you to visit Booth 45, where Medical Specialist representatives will be pleased to welcome old and new friends of the Missouri State Medical Association. Recent literature and information regarding Carnation Evaporated, Carnation Instant Non-Fat, and our newest product, Carnalac, are available.

The Stuart Company, Pasadena. Booth 46.

The Stuart representatives extend a cordial invitation to physicians attending this meeting to discuss with them the latest pharmaceutical developments of the Stuart Company. Especially featured are Effersyllium, Effergel and Effersyl—the first effervescent bulk laxatives. Also featured is Mulvidren—the Softab vitamin for all age groups.

Pepsi-Cola Bottlers of St. Louis, Inc. Booth 47.

The Upjohn Company, Kalamazoo, Mich. Booth 48.

Professional representatives of The Upjohn Company are eager to contribute to the success of your meeting. We are here to discuss with you products of Upjohn research

ANNOUNCING SCHERING'S NEW MYOGESIC^x

RELAX™ CARISOPRODOL

-EASES MUSCLE SPASM & PAIN IN SPRAINS, STRAINS, LOW BACK PAINS

^xMYOGESIC muscle relaxant—analgesic

Schering

H-229

whenever there is inflammation, swelling, pain

VARIDASE®

STREPTOKINASE-STREPTODORNASE LEDERLE

BUCCAL *Tablets*

conditions for a fast comeback . . .

5 days of classic therapy after 43 hours of VARIDASE

as in cellulitis*

Until VARIDASE stemmed infection, inflammation, swelling and pain, neither medication nor incision and drainage had affected the increasing cellulitis.

VARIDASE mobilizes the natural healing process, by accelerating fibrinolysis, to condition the patient for successful primary therapy. Increases the penetrability of the fibrin wall, for easy access by antibodies and drugs . . . without destroying limiting membrane . . . and limits infiltration. Prescribe VARIDASE Buccal Tablets routinely in infection or injury.

*Innerfield, I.: Clinical report cited with permission.

VARIDASE BUCCAL Tablets contain:
10,000 Units Streptokinase, 2,500 Units Streptodornase.

Supplied: Boxes of 24 and 100 tablets

Lederle

LEDERLE LABORATORIES,
A Division of American Cyanamid Company, Pearl River, N. Y.

that are designed to assist you in the practice of your profession. We solicit your inquiries and comments.

WM. P. POYTHRESS & CO., INC., RICHMOND, VA. BOOTH 49.

A cordial welcome awaits you from Harper Gordon at the Poythress booth. Solfoserpine, new distinctive combination of reserpine, phenobarbital and colloidal sulfur; Murdrane, outstanding anti-asthmatic tablet; Solfoton; and other Poythress products are featured. We will be grateful for your requests for literature and trial supplies.

GREAT BOOKS, GRAND RAPIDS, MICH. BOOTH 50.

The Great Ideas Program, a new advancement in liberal education, is built around the revolutionary Syntopicon. This master-key "Idea-Indexes" all the Great Books, making it possible to find what the great writers and thinkers said about any ideas in minutes. The Program will help business and professional people, students, graduates—or anyone interested in exploring the fascinating world of great ideas.

ENDO LABORATORIES, RICHMOND HILL, N. Y. BOOTH 51.

Endo Laboratories are featuring the following therapeutic preparations: Coumadin® (warfarin) Sodium, the more nearly ideal anticoagulant. Coumadin is the only non-heparin anticoagulant which can be adminstered parenterally as well as orally to provide full range anticoagulation. In providing predictable therapeutic cover with fewer "escapes." Coumadin permits both acute and long term anticoagulation with less frequent prothrombin time determinations. Coumadin is the original and only warfarin sodium responsible for establishing this drug as "the best anticoagulant available today." Numorphan®, 1-14 hydroxydihydromorphinone, the analgesic with wide clinical acceptance, provides effective and lasting relief of pain. Thorough analgesia follows within 5 to 10 minutes after intramuscular injection.

V. MUELLER & COMPANY, CHICAGO. BOOTH 52.

The V. Mueller & Company exhibit features, principally, an interesting selection of fine surgical instruments—both standard and special—of particular importance to the general surgeon. A number of new items and specialties are included in the display. We invite your instrument problems.

MISSOURI MEDICAL SERVICE, ST. LOUIS. BOOTH 53.

THE WARREN-TEED PRODUCTS COMPANY, COLUMBUS, OHIO. BOOTH 54.

DOHO CHEMICAL CORP., NEW YORK. BOOTH 56.

Doho Chemical Corporation is pleased to exhibit: Auralgan, otitis media and removal of cerumen; Otosmosan, fungicidal and bactericidal in the suppurative and aural

---

. . . MALNUTRITION OR
LEG CRAMPS DURING PREGNANCY?
OUTMODED AS GODEY'S FASHIONS!

℞ NEW
PRENALIN-O®
PRENATAL SUPPLEMENT

1. Oyster Shell Calcium - Phosphorus Free!
2. New Form of Iron!
3. Dry Filled Capsule - Sure, Quick Absorption!
4. Economical Once-A-Day Dosage!
5. Wider Range Nutritional Support!
6. Relieves Troublesome Leg Cramps!

EACH dry filled capsule (lavender and white) provides:

Ferrous Fumarate (Iron)	150 mg.	Vitamin B-12 (Cobalamin conc. NF)	2 mcg.
Deep sea oyster shell (Calcium)	600 mg.	Folic Acid	0.25 mg.
Vitamin C	50 mg.	Niacinamide	10 mg.
Vitamin A	4000 USP Units	Vitamin K (Menadione)	0.25 mg.
Vitamin D	400 USP Units	Rutin	10 mg.
Vitamin B-1	2 mg.	Sodium Molybdate	3 mg.
Vitamin B-2	2 mg.	Fluorine (Calcium Fluoride)	0.25 mg.
Vitamin B-6	0.8 mg.	Iodine (Potassium Iodide)	0.15 mg.

SAMPLES ON REQUEST

TUTAG S. J. TUTAG & CO.
DETROIT 34, MICHIGAN

...Pathibamate® 400 200

meprobamate with PATHILON® tridihexethyl chloride Lederle

greater flexibility in the control of tension, hypermotility and excessive secretion in gastrointestinal dysfunctions

PATHIBAMATE combines two highly effective and well-tolerated therapeutic agents:
mebrobamate (400 mg. or 200 mg.) widely accepted tranquilizer and . . .
PATHILON (25 mg.)—anticholinergic noted for its peripheral, atropine-like action, with few side effects.

The clinical advantages of PATHIBAMATE have been confirmed by nearly two years' experience in the treatment of duodenal ulcer; gastric ulcer; intestinal colic; spastic and irritable colon; ileitis; esophageal spasm; anxiety neurosis with gastrointestinal symptoms and gastric hypermotility.

Two dosage strengths—PATHIBAMATE-400 and PATHIBAMATE-200 facilitate individualization of treatment in respect to both the degree of tension and associated G. I. sequelae, as well as the response of different patients to the component drugs.

Supplied: **PATHIBAMATE-400**—Each tablet (yellow, 1/2-scored) contains meprobamate, 400 mg.; PATHILON tridihexethyl chloride, 25 mg.
PATHIBAMATE-200—Each tablet (yellow, coated) contains meprobamate, 200 mg.; PATHILON tridihexethyl chloride, 25 mg.

Administration and Dosage: **PATHIBAMATE-400**—1 tablet three times a day at mealtime and 2 tablets at bedtime.
PATHIBAMATE-200—1 or 2 tablets three times a day at mealtime and 2 tablets at bedtime.
Adjust to patient response.

Contraindications: glaucoma; pyloric obstruction, and obstruction of the urinary bladder neck.

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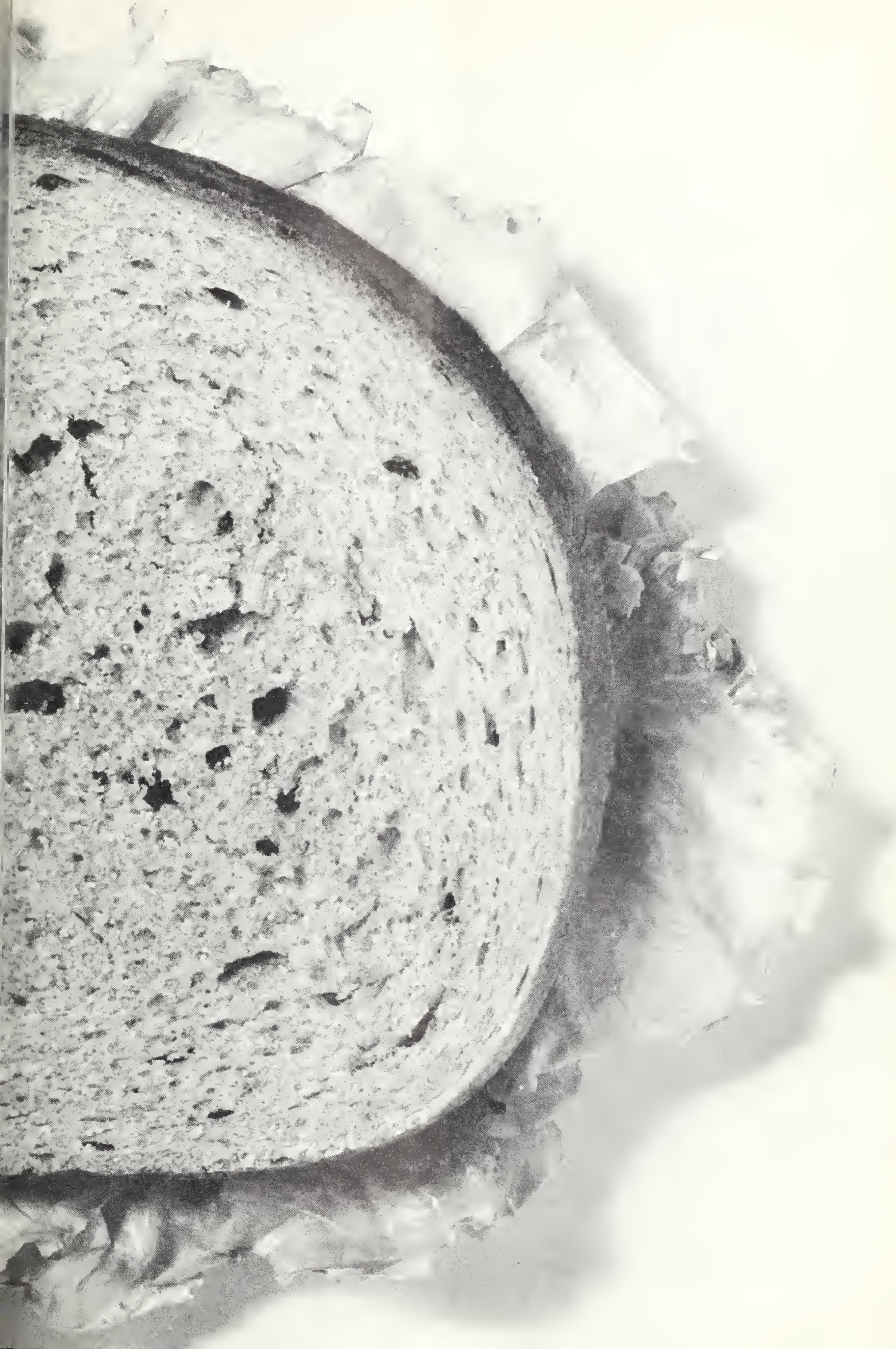

Missouri Medicine

THE JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Curiosa et Trivia

WILLIAM B. McCUNNIFF

With never a thought for the ensuing to-do, French scientist, Jean Nicot recommended tobacco as a relief for many ailments. He failed to foresee his beloved nicotine getting all tangled up in so many thousand filter traps!

* * *

Surnamed Buddha, Gautama understandably became emaciated after six years of subsiding on mosses, roots, seeds, and wild fruits. Still, he was always reported as being in good health.

* * *

Merely reporting, without a hint of an editorial: Texas has more hospitals—555—than any other state.

* * *

Charlemagne ". . . abominated drunkenness . . . rarely had more than three cups of wine in the course of a meal . . . after which he took a good nap of two to three hours duration. . . ." And small wonder!

Capsule Clinics

- Early ambulation after acute nephrotic symptoms subsided had no adverse effect on the apparent health of 35 children followed for a minimum of two years. McCory, W. W., et al., Pediatrics **23**:395, 1959.

- Use of Cerumenex in 84 patients with impacted cerumen resulted in complete removal of wax in 91 per cent of cases. Dirr, J. P., et al., J. Med. Soc. New Jersey **56**:504, 1959.

- Toilet training has no fundamental bearing on the causation of enuresis but resistance to training is often a contributory factor. Dimson, S. B., Brit. M. J. **2**:666, 1959.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

Representative Alger Matches Wits With Reuther

Speaker at the banquet in honor of Past Presidents during the Annual Session will be Representative Bruce Alger of Texas. Recently he debated with Reuther in the House Ways and Means Committee concerning the Forand Bill and the following from the *Medical Annals of the District of Columbia* may acquaint members better with Representative Alger.

Under the heading "Reuther Meets His Match" appeared the following:

"Those who attended the hearings before the House Ways and Means Committee on the so-called Forand Bill (H.P. 4700) in July were not only enlightened but entertained. It is perhaps not necessary to remind readers that this controversial legislation would amend the Social Security Act and the Internal Revenue Code so as to provide insurance against the costs of hospital, nursing home and surgical services for persons eligible for Old Age and Survivors Insurance Benefits.

"As stated previously in this column, witnesses included leaders in many fields, among them AFL-CIO's Walter Reuther. Legislators were well aware that this shrewd, articulate and combative labor leader is at his best in debate. This, however, did not deter Representative Bruce Alger, of Texas, from matching wits with him. It soon became evident to those present that Alger was no push-over for Reuther.

"The following colloquy, reprinted from the transcript of the hearings, is an example of the sharpness of their exchange:

'Mr. Alger: You said earlier, Mr. Reuther, that you have a great admiration and respect for the doctors who helped you in your own difficulty and you pointed out . . . as I recall . . . that cutting fees was a quixotic thing. Did you know that many, many doctors cut their fees and that many areas of our country provide free care for our people now, with doctors getting no fees at all?

'Mr. Reuther: I think there is no question that there are many, many dedicated doctors in America who are performing wonderful service to people who need it without compensation. I am aware of that. But this is not how a free people ought to deal with this basic problem. . . . Dr. Peggs (Dr. Harold J. Peggs, writing in *Medical Economics* for April 27, 1959) says very clearly that he thinks the medical societies ought to quit kidding themselves because they are not going to be able to solve this trouble by cutting fees and ultimately something approximating the Forand Bill will be adopted by Congress. I think that Dr. Peggs makes a great deal of sense and that the medical societies ought to use their good influence to try to shape the legislation along constructive lines rather than just oppose it.

'Mr. Alger: You get after the doctors considerably for their political activity down at the bottom of that page. I want to ask you, do you think the doctors have done a better job politically in this particular issue they are interested in than you folks do by your lobbying, on almost every legislative issue, on all of which you spend money?

'Mr. Reuther: You know, when I was in the hospital I had many, many bull sessions with a lot of doctors about these matters. I personally think that their best interests, the best interests of America and the best interests of the people whom they are dedicated to care for would best be served, if instead of fighting these battles in terms of words, we sat down and said, "Now, what are the problems? What are the needs? What can we do to work together to find reasonable, sensible and constructive ways to try to commit our resources to helping meet these needs?"

'I think on that basis we can make progress. Instead of that they hire these public relations experts, Madison Avenue boys, who go out and coin slogans and waste their money. I read their stuff, the whole argument before and after Social Security was passed. It is the same old rehash, the playing of a broken record. They ought to save their money and sit down with the people who have problems and see if we can work out a joint approach. We have respect for their medical competence. The people have the need. Why can't we get together and work this thing out sensibly and constructively?

'So my suggestion to them is to save their money and not waste it on these high-powered Madison Avenue hucksters. Let us sit down and work out an approach that we can cooperate on and we will all be better off.

'Mr. Alger: Maybe some of the union members would say the same thing about all the money you could save on legislative issues.

'Mr. Reuther: You come to our convention and you can see our union members. We have a democratic union where every member has the right to get up and talk. When they make a

(Continued on page 364)

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Across Missouri

SEEMS MISSOURI WAS RIGHT ALL THE TIME

In the last session of the legislature, it was proposed that the legend "Family Vacationland" be placed on the automobile license tags of Missourians. Although much better than the statements appearing on the tags of many states, the measure did not pass.

Now a group of traffic engineers recommends that all slogans be taken from license tags in the interest of readability, the purpose of the tags.

FIRST AID GETTING IMPETUS

Upon recommendation of the American College of Surgeons, the American Association for the Surgery of Trauma and the National Safety Council, a drive has been spearheaded in the eastern part of the state to have ambulances and ambulance drivers better equipped to take care of emergencies. Dr. Oscar P. Hampton, University City, headed a joint action subcommittee which studied the problem nationally. The St. Louis Medical Society is petitioning Mayor Tucker, of St. Louis, for help in securing an ordinance to regulate both public and private ambulances. The resolution presented to the Mayor asked that an ordinance would:

1. Require proper equipment on all ambulances to splint fractures, control hemorrhage, dress wounds and give oxygen.
2. Regulate the speed of ambulances because "high-speed transportation is not necessary."
3. Require ambulance personnel to be trained in advanced first aid and in emergency splinting of fractures at the accident scene.

STATE MENTAL HEALTH RATING TO SOAR

"This decade—the 1960's—will see Missouri climb out of the Dark Ages in mental health and rank with the first five states in the nation," said Francis Smith, St. Joseph, chairman of the Missouri Mental Health Commission. He was the speaker before a St. Joseph Mental Health Association meeting recently. He said that the present "long-range" mental health program in the state will have this accomplishment.

CANCER WORK PROGRESSES

In a year end report of the Missouri Division of the American Cancer Society, it was reported that the showing of the two films, "Breast Self Examination," and "Time and Two Women" evidently had much educational value, judging by the increase in tests reported by pathologists.

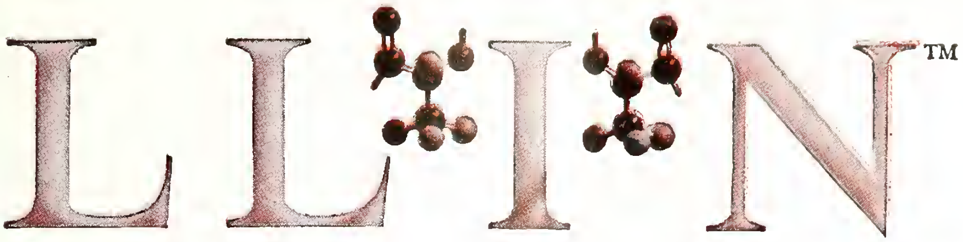
A budget of $422,047 has been set for the operation of the Missouri Division for the period of September 1, 1959, to August 31, 1960. The largest single item is for public education. Last year $191,722 was spent on research in Missouri, Menorah Hospital, Kansas City, the University of Missouri, Washington University and St. Louis University all taking part.

SPRING AND THE STATE PARKS

During 1960 two additional state parks will be opened, the Mark Twain Shrine at Florida, and the Pershing Museum at Laclede. Work will begin on a resort hotel at Table Rock and improvements will be made at many of the parks. Last year approximately five million people visited the state parks in Missouri, an increase of two million over a couple of years ago. It is estimated that last year 1,249,396 cars passed through the gateways to the parks, with 285,717 bearing out-of-state licenses. Last year 295,634 people paid for the privilege of spending the night in a state park, reflecting a gain of 275 per cent in four years. Missouri is becoming a "family vacationland" whether it ever goes on the license plate or not.

DROP IN CHILDREN'S DISEASES

A slight reduction in children's communicable diseases was reported in Kansas City in 1959. The number of cases of chicken pox, measles, mumps and whooping cough was down from 1958. Measles showed the greatest drop, from 642 in 1958 to 392 in 1959. There were no cases of diphtheria.



Relation of
ntermittent
blood levels
YNCILLIN
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efficacy

SYNCILLIN, like all clinically available penicillins, is bactericidal. Periodic high blood concentrations may be sufficient to permit complete eradication of sensitive pathogens. According to Eagle,[6] "Soon after penicillin attains effective concentrations, the bacteria cease multiplying; and the bacteriostatic effect persists for a number of hours after penicillin has fallen to concentrations that are wholly ineffective. . . . The therapeutic significance of this postpenicillin recovery period is enhanced by the fact that the recovering bacteria, damaged but not killed by the previous exposure to penicillin, are abnormally susceptible to the host defenses. In consequence, the bactericidal process *in vivo* continues for many hours after the drug itself has fallen to ineffective concentrations."

luced rate of
inactivation
YNCILLIN
by staph
enicillinase

Bacterial resistance to penicillin has been attributed to the action of penicillin-inactivating enzymes produced by the invading organisms. SYNCILLIN is less affected by staphylococcal penicillinase than either of its component isomers. Further, SYNCILLIN is shown to be less inactivated by this enzyme than penicillin V or penicillin G. Penicillinase from *B. cereus* likewise inactivates SYNCILLIN less rapidly than penicillin V or G.

Indications: SYNCILLIN is recommended in the treatment of infections caused by pneumococci, streptococci, gonococci, corynebacteria, and penicillin-sensitive staphylococci. In addition, SYNCILLIN is effective against certain strains of staphylococci resistant to other penicillins. SYNCILLIN, like other oral penicillins, is not recommended at the present time in deep-seated or chronic infections, subacute bacterial endocarditis, meningitis, or syphilis.

Dosage: 125 mg. or 250 mg. three times daily, depending on the severity of infection. Larger doses (e.g., 500 mg. t.i.d.) may be used for more severe infections. SYNCILLIN may be administered without regard to meals. Beta hemolytic streptococcal infections should be treated with SYNCILLIN for at least ten days.

Precautions: At the present time it is not possible to draw definite conclusions regarding the incidence of allergenicity to SYNCILLIN or its cross-allergenicity with natural penicillins. *Therefore, the usual precautions for oral penicillin therapy should always be observed.* Patients with histories of asthma, hay fever, urticaria, or previous reactions to penicillin should be watched with special care. Administration of oral penicillin, in rare instances, may provoke acute anaphylaxis, particularly in penicillin-sensitive individuals.

Diarrhea has been reported occasionally following heavy dosage. If this occurs, lengthen the interval between dosages.

If superinfection occurs during therapy, appropriate measures should be taken. Since some strains of staphylococci are resistant to SYNCILLIN as well as to other penicillins, cultures and sensitivity tests should be performed where indicated by clinical judgment. As is true with all antibiotics, clinical response does not always correlate with laboratory bacterial sensitivity reports.

Supply: 125 and 250 mg. tablets, bottles of 25 and 100. 125 mg. powder for oral solution, 60 ml. vials.

References: 1. Wright, W. W.: Microbiology Report to Bristol Laboratories Inc. 2. Morigi, E. M. E.; Wheatley, W. B., and Albright, H.: Paper presented at the Seventh Antibiotic Symposium, November 4-6, 1959, Washington, D.C. 3. Editorial: New England J. Med. **261**:305 (Aug. 6) 1959. 4. King, A.: Lancet **1**:651 (March 29) 1958. 5. Epstein, E.: J.A.M.A. **169**:1055 (March 7) 1959. 6. Eagle, H. and Musselman, A. D.: J. Bact. **58**:475, 1949.

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JOHN F. PEARL, M.D.

Missouri Academy of General Practice

A meeting of the Board of Directors was held in Jefferson City, Sunday, January 24. Dr. William Cassel, Director, Bureau of Maternal and Child Health, Missouri Division of Health, presented, for the board's study and suggestions, a proposed new Missouri birth certificate. After considerable discussion the board voted approval of the certificate in general.

The board met on January 24.

Dr. Doyle McCraw, Bolivar, Chairman of the Academy's Education Committee, reported on plans for the 12th Annual Scientific Assembly of the Missouri Academy, to be held at the Chase Hotel, St. Louis, November 5-6, 1960. He stated that the scientific program would consist of four sessions, namely; a symposium on "Neurology and Psychology," a symposium on "Medicine," a "General Session" and a symposium on "Surgery." A panel discussion period will follow each session.

Both out of state and in state speakers are scheduled to appear on the two-day program. Dr. McCraw also reported on the program for the 1960 Spring Clinical Conference at the University of Missouri Medical Center, May 11 and 12. The Academy is a cosponsor of this session. Look for the outstanding detailed program of this 1960 conference on this page in a later issue, but check those dates on your calendar now.

Dr. P. C. Hall, President, presented names of doctors applying for membership. Dr. Charles E. Michaelis, Fredericktown, and Dr. Albert D. Eshelman, Independence, were elected to active membership. The following interns at Kansas City General Hospital were elected to associate membership: Joseph E. Johnson, Ivan H. Carper, William E. St. Clair, Carle H. Schroff, Larry B. Summers, Jerome S. Spitzer, Delbert E. Scott, Myron R. Hausheer and Lawrence L. Perry, Jr.

Dr. Walter Gunn, St. Louis, Chairman of the Hospital Committee, reported two applications from Missouri interns for the Mead Johnson Scholarships for General Practice residences.

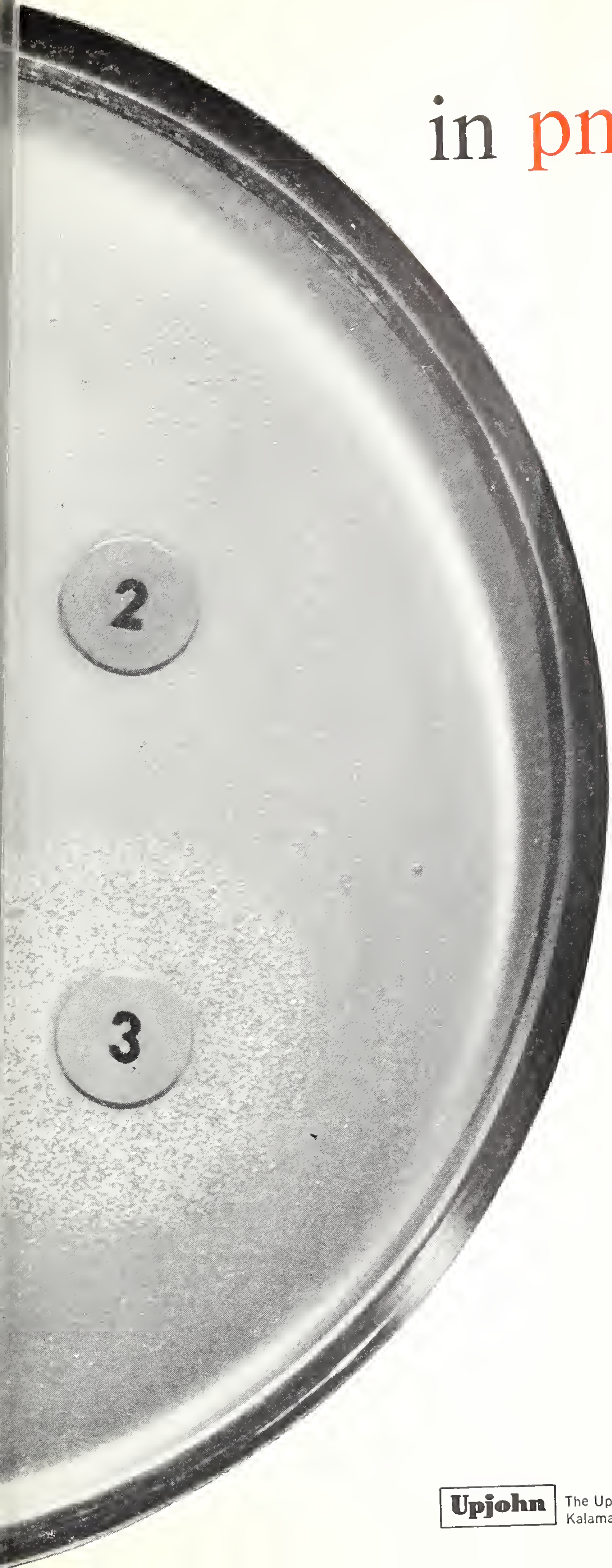
Dr. Cecil Leitch, Kansas City, President-Elect, discussed briefly a recent postgraduate program on adult psychiatry held in Kansas City under the auspices of the Kansas City Academy of General Practice.

Dr. Kenneth Knabb, Springfield, reported on "A Symposium on Chest Diseases" given at the Missouri State Sanatorium, Mount Vernon, January 9-10, 1960. The meeting was sponsored by the Southwest Missouri Chapter of the Missouri Academy and cosponsored by the Missouri Chapters of the American Trudeau Society and the American College of Chest Physicians and the State Sanatorium. More than 75 physicians attended. The program was acceptable for nine hours of Category I postgraduate credit.

More than 75 doctors attended the Southwest Missouri Academy Chapter meeting.

Dr. Walter Gray, St. Louis, presented a letter from Dr. C. A. Brasher, Superintendent and Medical Director, Missouri State Sanatorium, Mount Vernon, concerning the School Certification Tuberculin Testing Program being carried out as a pilot study in Newton County, as a good method of creating interest and activity in tuberculin testing. Following discussion, on motion, the program was approved.

The board voted to hold the 1961 Annual Scientific Assembly in Kansas City in the late fall if suitable dates can be found.



in pneumonia

. . . into a mixed culture of the three organisms commonly involved in pneumonia . . . *K. pneumoniae*, *Diplococcus pneumoniae*, and *Staphylococcus aureus* (in this case a resistant strain) . . . we introduce the five most frequently used antibiotics.

Twenty-four hours later (in this greatly enlarged photograph), note that only *one* of the five leading antibiotics has stopped *all* the organisms, including the resistant staph! This is Panalba.

In your next pneumonia patient . . . in *all* your patients with potentially-serious infections . . . provide this extra protection with your prescription:

Dosage—1 or 2 capsules 3 or 4 times a day. Supplied—Capsules containing Panmycin phosphate equivalent to 250 mg. tetracycline hydrochloride, and 125 mg. Albamycin as novobiocin sodium, in bottles of 16 and 100. *Now available:* new Panalba Half-Strength Capsules in bottles of 16 and 100.

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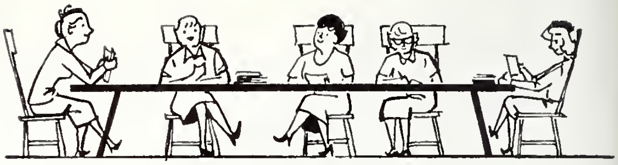
Woman's Auxiliary



May I take this opportunity at the end of this short and very busy year to thank the members of the Missouri State Medical Association for their support and encouragement given to me and to the auxiliaries throughout the state. It has been a pleasure to work with and for you.

Mrs. Stanley S. Peterson

Another year of making plans, completing projects and achieving goals has gone by, and it is nearly time for Convention again, when we report and evaluate what has been done. Convention time is also a time for anticipated reunions with friends whom we see perhaps only this one time a year.

The St. Louis City and County Medical Societies and Auxiliaries will be our gracious hosts again this year for the Convention to be held in St. Louis at the Sheraton-Jefferson Hotel, March 13-15. Registration for Auxiliary members will start at 1:30 p.m. Sunday, March 13, in the second floor foyer of the hotel. At 2:30 p.m. the Pre-Convention Executive Board Meeting will begin in Room 7. At this meeting for all state officers, county presidents, county presidents-elect, and past presidents all business to be brought before the general assembly must be presented and passed upon.

The first social event of the Convention, to which all doctors, Auxiliary members and their friends are invited—and urged to attend—is the social hour sponsored by the St. Louis City and St. Louis County Medical Societies, honoring Dr. R. O. Muether, President-Elect of the MSMA. This will be followed by "A Night in Paris"—a buffet dinner in the Boulevard Room of the hotel, followed by appropriate entertainment. The St. Louis County Auxiliary is planning to make this a "night to remember." Please mark your calendar now to plan to arrive in St. Louis in time to attend this get-acquainted party!

Early Monday morning, the 14th, past state presidents of the Auxiliary will hold a reunion breakfast in the president's suite. This is an occasion to which all past presidents look forward, and is always well attended.

The general business meeting will convene at 9 a.m. on Monday, and reports of the officers, directors, committee chairmen, and county presidents will be the main order of business. At this time the pattern of our year begins to unfold as we see what has been accomplished by auxiliaries throughout the state. Each county president will report on "Our Best" project.

The Monday luncheon will honor Dr. Ralph Perry, President, and Dr. R. O. Muether, President-Elect of MSMA, who will bring greetings from the Association. Also honored will be Dr. W. W. Tillman, Jr., and Dr. H. C. Bauman, advisors to the Auxiliary; past presidents of the State Auxiliary; and Mrs. Frank Gastineau, Indianapolis, Ind., National President of the Auxiliary.

Mrs. Gastineau, who will be our luncheon speaker, was elected president at the Convention in Atlantic City last June. She brings to her position 33 years of auxiliary experience. She was the first National AMEF chairman, and served in that position from 1952-56. Her organization of that committee and appeal on behalf of the foundation got the project off to a good start.

In 1922 she married the late Dr. Frank Gastineau, a specialist in dermatology and professor of dermatology at Indiana University. Their three children are all graduates of Indiana University. One son is assistant professor of radiology at his alma mater; another is a broker and builder; and the daughter is married to a doctor. Mrs. Gastineau is a charming person, and we are pleased to have her as our guest.

Tuesday morning will again see us gathered for a general business meeting, featuring election of new officers and directors and election of our delegates to the annual national convention in Miami Beach, June 13-17, 1960.

Algonquin Country Club will be the scene of our Installation Luncheon on Tuesday. Buses will transport delegates to the country club from the hotel. Honored guests will be Mrs. John M. Chenault, of Decatur, Alabama, president of the Woman's Auxiliary to the Southern Medical Association; and the newly-elected officers of our state Auxiliary.

Following greetings from Mrs. Chenault, Mrs.

(Continued on page 370)

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RAY HEPNER, M.D., *Baltimore, Md.*

Some Unusual Varieties of Visceral Epilepsy

The problems involved in a diagnosis of epilepsy are legion. Not only are the psychologic and social implications excessively disturbing to patient and physician alike, but the vagaries of manifestations and associated phenomena, further confuse the picture. Lack of satisfactory definition of a fit, and of unassailable diagnostic procedures is a greater handicap. This presentation of some unusual cases may be illustrative of some practical clinical means of approach which have stood the test of time and critical review for nearly half a century.

Dr. Hepner is Professor of Pediatrics, Department of Pediatrics, University of Maryland, Baltimore, Md. Prior to September 1, 1959, Dr. Hepner had been Professor of Pediatrics at the University of Missouri School of Medicine.

This was presented at the May 16, 1958, meeting of the Missouri Chapter of the American Academy of Pediatrics at Columbia, Mo.

No satisfactory definition of what constitutes a fit has yet been devised. The diversity of manifestations,[1] the uncertainty of diagnostic procedures even including electroencephalography,[2] and the vagaries of associated phenomena in the total group[1] are responsible in part for this confusion. False and unreasoning fear of the diagnosis of epilepsy has made its contribution as well. Wilson[3] has suggested that any evanescent, paroxysmal recurrent and uncontrolled manifestation of any neural process might be regarded as a fit. This concept of epilepsy allows discussion along lines uncontaminated by preconceptions and innuendos, resolves the several difficulties of more limited definitions, and yet retains the flavor of the problem.[4] The movements of some attacks are coordinate, of others are primitively violent, and some fits are characterized by inhibition of all movement. Sensory components may range from complicated oneact plays or ill defined aches to stabbing sensations. Where visceral centers are implicated, there may be no interference with consciousness, no involvment of skeletal muscle and none of the usual stigmata. Wilson's concepts are admirably designed for application to relatively common problems of diagnosis in infancy and childhood.

Case Reports

Case 1. *Duodenal ulcer versus abdominal epilepsy.*—This 10 year old white girl was referred to the University of Missouri Medical Center through the courtesy of Dr. D. Hata, with the chief complaints of intermittent abdominal pain accompanied by nausea and vomiting of two and one half years duration, with fatigue and weakness for from two to three months. Repeated examinations by the referring physician and by others were always within normal limits. The detailed history of these attacks was one of vomiting always preceded by nausea and followed by some residual abdominal soreness of brief duration. A definite relationship with meals was difficult to establish, but the vomitus almost invariably contained food. Over the preceding two or three months before admission, progressive weakness and fatigue developed, the patient withdrew from playing with other children, and had increasing lassitude with disinclination to leave the house.

The physical examination was entirely within normal limits except that she was slightly under height and mildly underweight for her age. The hemoglobin, hematocrit, white blood count and differential blood cell count were entirely within normal limits. The erythocyte sedimentation rate, radiologic examination of the upper gastrointestinal tract and an electrocardiogram were entirely within normal limits. Examination of the urine for reducing substance, protein and microscopic evidence of infection was negative. An electroencephalogram revealed a severe generalized cortical disturbance as well as a severe focal disturbance predominantly in the right temporal region. Phenobarbital, ½ grain three times a day, was prescribed. She has remained entirely free of attacks of abdominal pain or vomiting, her weakness has disappeared and she now is within normal limits for both height and weight.

Discussion.—This girl's history might suggest superficially the possibility of duodenal ulcer. However, the stereotyped character of her paroxysmal and evanescent symptoms make them suspect on clinical grounds alone. Her feelings of lassitude, malaise and vague oppression are common accompanying features of visceral fits, even as a rather continuous symptom.

Case 2. *Recurrent urinary tract infection versus psychogenic vomiting with anxiety versus periventricular fits exemplified by hyperpyrexia, abdominal pain and vomiting, and polyuria.*

This 9 year old white girl was referred to the University of Missouri Medical Center through the courtesy of Dr. Leroy Miller. Her chief complaint was that she had had three episodes of severe midabdominal pain associated with fever to 104 F. and vomiting. On two occasions the vomiting persisted for two or three days, and extensive negative clinical and laboratory examinations were made by other physicians. The patient also had episodes of urinary frequency and nocturnal enuresis, but repeated urinalyses have always been within normal limits. The patient's home environment has been emotionally unstable, the parents divorced, the father under psychiatric care for psychosis, and the mother ridden by premenstrual tension. It was thought that the three severe attacks of vomiting were directly related to visits of the father with the children. A rather certain relationship existed in the mother's mind between her daughter's episodes of frequency and nocturnal enuresis, and the threat of visiting by the father.

Detailed examination in the hospital revealed no physical abnormalities. The hemoglobin, hematocrit, white blood count and blood smear were normal, as was the urine for reducing substance, protein, blood and microscopic examination. The nonprotein nitrogen was 29 mgms. per cent, stool cultures and examinations for blood, ova and parasites were negative. Intravenous pyelograms were entirely within normal limits and roentgenographic examination of the upper gastrointestinal tract was entirely within normal limits. The electroencephalogram revealed a moderately severe diffuse cortical disturbance, more marked in the right occipital and temporal regions.

Phenobarbital, ½ grain twice each day, was prescribed, and since that time there have been no recurrences of abdominal pain, no attacks of vomiting and no episodes of urinary frequency or enuresis. The father continues to visit as before.

Discussion.—As soon as the obvious possibility of urinary tract infection was removed, the family's emotional problems were made the scapegoat. Considerable difficulty with the mother was encountered when careful examination of the patient's organic status was suggested. Her skepticism continued when prophylaxis against her daughter's attacks was prescribed. This skepticism remained until the emotional trigger for the girl's attacks had been tripped repeatedly without precipitating a fit.

Her fits are of additional interest in that fever was a constant accompanying symptom, and had its onset almost together with her vomiting. On all occasions as the fever subsided, so did the almost continuous vomiting. The periventricular quality of her discharges is even more emphasized by tremendous volumes of urine passed during her episodes of urinary frequency, as well as during the two to three day long crises of vomiting.

Case 3. *Rheumatic fever versus sensory and visceral fits.* This 11 year old white male was referred to the University of Missouri Medical Center by Dr. Thomas J. Hopkins with a three month history of weakness, pains in the extremities, easy fatigability and a weight loss of seven pounds. Before the onset of his progressively more severe difficulty, he had had a sore throat and was treated by another physician with multiple injections of penicillin, salicylates and bed rest. The pains in his extremities were severe and debilitating and came in episodes, but no objective signs of swelling, redness or heat were ever observed. Neither were any joints tender to touch. He also had recurrent, sudden sharp pains in the chest. The usual confirmatory features of rheumatic fever were absent, and the patient was referred for consultation.

On admission to the hospital he appeared to be chronically ill and was whiningly complaining. However, there were no specific abnormalities of temperature, pulse, respiration, blood pressure or general physical examination, with the exception of mild chronic malnutrition. Laboratory examination revealed a normal hemoglobin, hematocrit, white blood count and differential count. Percutaneous testing for tuberculosis was negative, and for histoplasmosis was positive. The erythrocyte sedimentation rate was normal. No betahemolytic streptococci were found in the throat culture and his ASO titers were normal. The total serum protein was 7.4 gms. per cent with a paper electrophoresis protein fractionation revealing no qualitative changes from normal. X-rays of the chest revealed no evidence of pulmonary or cardiac abnormalities and repeated electrocardiographic examination was within normal limits. Repeated follow-up examinations were entirely within normal limits. Electroencephalograms revealed dis-organized cortical activity with much scattered spike-like activity with persistent amplitude and phase asymmetry. The right temporal region had focal spiking which was accentuated by hyperventilation.

The boy was given ½ grain phenobarbital three times each day and, after approximately two weeks of this medication, the parents told their family physician that he was completely changed, was entirely free of complaints, and he has continued to be so with prophylactic therapy.

Discussion.—The history of this patient resembles the common course of rheumatic fever. Closer examination revealed the paroxysmal character of the complaints and disproportion between pain and objective signs of polyarthritis. These inconsistencies plus absence of the usual laboratory signs of rheumatic fever led to referral of the patient. Further detailed examinations made the possibility of rheumatic fever seem even more remote. The spasmodic character of his chest and extremity pains, his episodes of "angor animi" and their stereotyped and inappropriate quality without support of physical or laboratory examination led to a skeptical order for an electroencephalogram, as well as extensive interviewing of the family. The results of the tracing were helpful and prophylaxis was successful.

Discussion

Discussion of diagnosis of visceral epilepsy rests most easily on the ground of Wilson's criteria of evanescent, paroxysmal, recurrent and uncontrolled manifestations. Where visceral components accompany the commonly accepted varieties of fits, diagnosis is easy. When these phenomena come by themselves, their epileptic quality may be overlooked. Careful searching through the patient's and the family's history will often be rewarded by other stigmata of epilepsy in the patient or in the genetic pattern.

Electroencephalography is especially useful. When the history is uncertain, and the manifestations are borderline, electrical tracings may support the diagnosis. However, a blind reliance on diagnosis by electroencephalography alone is to be avoided for the following reasons:[2] From 10 to 20 per cent of those having convulsions have normal EEG's. From 10 to 15 per cent of normal persons who have never had a fit have abnormal EEG's. Abnormal EEG's may be found in patients with psychoneurosis and anxiety states. Sydenham's chorea has an EEG pattern common to patients with major attacks. Abnormal EEG's by adult standards are increasingly common in children of decreasing age under 10 years.

The therapeutic test may be helpful in patients with frequent and clear-cut fits. However, from recent experience with 14 patients at the University of Missouri Medical Center, and from scanty reports from the recent literature, elimination of attacks can be expected in less than three fourths of the patients with clear-cut visceral fits.[5] Where phenobarbital and dilantin® have failed, we have been able to control completely only one patient with other medications.

Summary

Separation of visceral or periventricular fits from many behavorial, psychologic and psychosomatic phenomena often is possible on clinical grounds. Wilson's statement that any fugitive, paroxysmal, uncontrolled and recurrent manifestation of any neural process on any level of the neural axis might be regarded as a fit, allows this separation to be made.

Acknowledgment

The electroencepholograms were read from all patients by Dr. Robert H. Barnes of the Kansas City Psychiatric Receiving Center.

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GERARD J. VAN LEEUWEN, M.D., *Odessa, Texas;*
JAMES L. HARWELL, *and* ROBERT L. JACKSON, M.D., *Columbia*

Rheumatic Fever And Congenital Heart Disease

Report of a Survey in the State of Missouri

Accurate determination of the incidence of rheumatic fever is impossible since the disease has not generally been made reportable and its diagnosis is frequently indefinite.

During the last fifty years there has been a gradual decline in rheumatic fever. Wilson points out that not only did this decline antedate the use of antibacterial agents, but since then the incidence of rheumatic fever has not changed appreciably.[1] In 1946 one of us conducted a survey of heart disease in a rural Iowa county, with special reference to rheumatic fever.[2] Sixteen patients with rheumatic fever in a school population of 5,058 (5 to 19 years inclusive) were discovered. Of these, 11 had definite rheumatic heart disease. In 1955 a statewide survey was conducted in Minnesota.[3] Even though only 148 cases of rheumatic fever were reported to the Minnesota Health Department in 1954, 2,297 were reported in the 1955 survey (table 1).

Although there has been a decline in rheumatic fever in the last 50 years, the Missouri Heart Association in co-operation with the Committee on Cardiac Disease of the Missouri State Medical Association considered it wise to determine the situation in Missouri, as had been done in Minnesota. The Missouri Heart Association carried out the survey by questionnaires to physicians and the results are presented.

Dr. Van Leeuwen, now practicing in Odessa, Texas, assisted with this study during his residency training at the University of Missouri following graduation from the University of Iowa. Mr. Harwell is a junior medical student (1959-1960) and assisted on this study after being awarded a summer fellowship by the Missouri Heart Association. Dr. Jackson is Professor of Pediatrics and Head of the Department of Pediatrics of the University of Missouri School of Medicine.

TABLE 1

MINNESOTA AND MISSOURI SURVEYS

	Minnesota	*Missouri*
Number of questionnaires	3,063	3,600
Questionnaires returned	1,556	1,019
Number of physician reporting rheumatic fever	597	341
Cases of rheumatic fever	2,297	1,010
Number of physicians giving prophylaxis	644	422
Patients receiving prophylaxis	3,323	2,083
Number of physicians reporting congenital heart disease	——	371
Patients with congenital heart disease	——	1,958

The Rheumatic Fever and Congenital Heart Disease committee of the Missouri Heart Association decided that one of its first objectives would be to try and obtain some idea as to the incidence of rheumatic fever and congenital heart disease in Missouri. Because of the somewhat unexpected results and success of the Minnesota survey, it was decided to attempt a similar survey in Missouri.

It is hoped that this report will stimulate renewed interest in early recognition of rheumatic fever and prompt institution of therapy so that residual cardiac damage may be decreased. It is hoped that it also will stimulate more interest in earlier definitive diagnosis of congenital heart disease especially for those children who may have surgically correctable lesions.

Procedure and Results

The survey was initiated in February of 1959. The Missouri Heart Association in co-operation with the Missouri State Medical Association mailed 3,600 questionnaires to the members of the Missouri State Medical Association. A reproduction of the questionnaire is given in figure 1.

QUESTIONNAIRE FOR RHEUMATIC FEVER AND CONGENITAL HEART DISEASE SURVEY

Date

TO: All Physicians in Missouri

Please complete the following queries and return this sheet to the Missouri Heart Association in the enclosed return-addressed envelope.

1. **How many patients in your practice have you treated for acute rheumatic fever in the past twelve months?**
2. **How many patients are under 15 years of age?**
3. **How many individuals in your practice are you now giving some form of prophylaxis, to prevent the recurrence of rheumatic fever?**
4. **What kind of prophylaxis are you using?**
5. **How many unequivocal cases of congenital heart disease are currently under your observation?**

Signed
Address

County

Please check type of Practice:
Internist
Pediatrician
General
Surgeon
Other

Please answer at once

Most of the questionnaires returned were dated the last few days of February and the first few days of March of 1959. The data obtained were tabulated by the Pediatrics Department of the University of Missouri School of Medicine.

Only 1,019 questionnaires were returned, or approximately 28 per cent of those mailed. Replies were distributed over the state, but not evenly. Forty-three per cent of the questionnaires returned were from the St. Louis area. Questionnaires were not received from thirty-two counties, most of which had physicians listed with the Missouri State Medical Association.

Nine hundred and eighty-seven were returned by physicians in active practice and this figure has been used to calculate the percentages used in tabulating the results.

Three hundred and forty-one physicians, or 34.5 per cent, reported treating one or more patients with active rheumatic fever in the last twelve months in all ages. Two hundred and fifty-one physicians, or 25.4 per cent, replying, reported treating one or more children under 15 years of age with rheumatic fever. Four hundred and twenty-two physicians, or 42.7 per cent, reported giving some form of prophylaxis to one or more individuals to help prevent recurrences of rheumatic fever. Three hundred and seventy-one physicians, or 37.6 per cent, reported having one or more cases of congenital heart disease under observation at the time of the survey.

One thousand and ten cases of active rheumatic fever were reported in all ages, an average of 1.02 cases per physician. Six hundred and ninety-eight of these were children under 15 years of age. Two thousand and eighty-three patients were reported to be receiving some form of prophylaxis to help prevent rheumatic fever, an average of 2.11 cases per physician. One thousand nine hundred and fifty-eight cases of unequivocal congenital heart disease were reported being observed at the time of the survey, an average of 1.98 cases per physician.

The participation of physicians according to type of practice is given in table 2. The practices are divided into six categories or specialties.

TABLE 2

PHYSICIANS RETURNING QUESTIONNAIRES BY PRACTICE

Type of Practice	*Questionnaires Returned*	*Per Cent of Total*
Internist	208	20.4
Pediatrician	64	6.3
General	316	31.0
Surgeon	151	14.8
Other	248	24.3
Retired or disabled	32	3.1
Total	1,019	99.9

Table 3 gives the number of cases of active rheumatic fever as reported by practice. General practitioners reported the largest number of cases and pediatricians reported the most cases per physician. Table 4 gives the number of cases of active rheumatic fever reported in children under 15 years of age, with the same distribution essentially, as in table 2.

Table 5 gives the number of patients receiving some form of prophylaxis against rheumatic fever, by practice. Internists reported more in-

TABLE 3

REPORTED CASES OF ACTIVE RHEUMATIC FEVER, BY PRACTICE

Type of Practice	*Physicians Returning Affirmative Replies*	*Cases Reported*	*Average Case Per Physician*	*Per Cent of Total Cases*
Internist	94	224	2.3	22.2
Pediatrician	41	225	5.4	22.2
General	196	526	2.6	52.1
Surgeon	7	19	2.7	1.9
Others	3	16	5.3	1.6
Totals	341	1,010	2.8	100.0

TABLE 4

REPORTED CASES OF ACTIVE RHEUMATIC FEVER UNDER 15 YEARS OF AGE, BY PRACTICE

Type of Practice	*Physicians Returning Affirmative Replies*	*Cases Reported*	*Average Case Per Physician*	*Per Cent of Total Cases*
Internist	41	68	1.6	9.7
Pediatrician	40	222	5.5	31.8
General	163	384	2.3	55.0
Surgeon	5	11	2.2	1.6
Others	2	13	6.5	1.9
Totals	251	698	2.6	100.0

TABLE 5

PATIENTS REPORTED RECEIVING PROPHYLAXIS AGAINST RECURRENT RHEUMATIC FEVER, BY PRACTICE

Type of Practice	*Physicians Returning Affirmative Replies*	*Cases Reported*	*Average Case Per Physician*	*Per Cent of Total Cases*
Internist	150	846	5.6	40.6
Pediatrician	49	503	10.2	24.1
General	215	707	3.2	33.9
Surgeon	6	24	4.0	1.2
Other	2	3	1.5	0.1
Totals	422	2,083	4.8	99.9

TABLE 6

CASES OF CONGENITAL HEART DISEASE REPORTED, BY PRACTICE

Type of Practice	*Physicians Returning Affirmative Replies*	*Cases Reported*	*Average Case Per Physician*	*Per Cent of Total Cases*
Internist	119	577	4.8	29.4
Pediatrician	62	845	13.6	43.2
General	182	499	2.7	25.5
Other	3	8	2.7	0.4
Surgeon	5	29	5.8	1.5
Totals	371	1,958	5.6	100.0

stances, with fewer reporting than general practitioners. Pediatricians again had the highest average cases per physician. Table 6 gives the number of cases of congenital heart disease by practice reporting.

The incidence of rheumatic fever, prophylaxis and congenital heart disease, all calculated on the basis of actual data available, is summarized in table 1. This incidence does not take into account the small number of physicians returning questionnaires.

Since only one fourth of the Missouri physicians returned questionnaires, it may be assumed that the number of cases and rates are incomplete. They are high enough, however, to indicate that a substantial problem exists. Since the proportion of physicians replying in Missouri is less than in Minnesota, it is quite possible that there is no appreciable difference in rates for the two States. Specifically in Minnesota there were 1.5 cases of acute rheumatic fever during the year per physician replying while in Missouri there was 1.0 case. In Minnesota, there were 2.1 cases on prophylaxis per physician replying, while in Missouri there were 2.0 cases.

The accuracy and reliability of the questionnaires were checked briefly in two rural communities and one metropolitan area. Twenty-two patients and their clinical records were examined and the criteria for the diagnosis of rheumatic fever were adequate with one possible exception.

DISCUSSION

Although the response to the questionnaire was not as good as expected, the data indicate that a relatively large number of children in Missouri have rheumatic fever or congenital heart disease. The data are difficult to interpret for several reasons. No replies were received from thirty-two rural counties which contain approximately 10 per cent of the population of Missouri. An additional portion of the population under the care of osteopathic physicians is not included in this survey. It is well known that some patients with milder forms of the disease never seek medical care and that often it is difficult to be certain that a patient does not have the disease. It also is well known that the incidence of rheumatic fever may vary widely from year to year. The fact that only 28 per cent of physicians returned questionnaires does not necessarily mean that only 28 per cent of the cases of rheumatic fever were reported. It seems plausible that the physicians who saw patients with rheumatic fever during the last year would have greater interest in returning the questionnaire.

During the last few years few patients with early acute rheumatic fever have been observed at the University of Missouri Medical Center. We have, on the other hand, had several children with subacute rheumatic fever with advanced forms of rheumatic heart disease referred for care. Consequently, we know that there are children in Missouri who have not had the advantage of early diagnosis and treatment. The primary purpose of this report is to increase awareness that rheumatic fever remains a serious problem in Missouri, and that at least a partial solution lies in earlier recognition and adequate therapy. It is well known that mortality and residual cardiac damage is greatly reduced by prompt initiation of antirheumatic therapy. Restricted activity, optimal nutritional care, and full therapeutic doses of salicylates remain the mainstay of therapy for the acute stage. Some observers believe that corticosteroid therapy is equally important if it is initiated quite early in the course of the disease.[4] It is not implied that early recognition and treatment will decrease the incidence of rheumatic fever, but rather that it will decrease the incidence of cardiac cripples resulting from rheumatic fever.

It is noteworthy that there were approximately as many cases of unequivocal congenital heart disease reported as rheumatic patients receiving prophylaxis. It would be of interest to know how many of these patients have been carefully evaluated with respect to diagnosis and surgical amenability of their lesions.

SUMMARY

The primary purpose of this report is to increase awareness that rheumatic fever remains a serious problem in Missouri; and that at least a partial solution lies in earlier recognition and adequate therapy.

Questionnaires were sent to medical doctors in Missouri, of which more than one fourth were returned. Replies by practicing physicians, totaled 987, of whom more than one third reported treating active rheumatic fever cases during the year. There were 1,010 cases of active rheumatic fever reported, with almost 70 per cent of them being under 15 years of age. Some form of prophylaxis against rheumatic fever was given to 2,083 individuals. Of the physicians replying, more than 40 per cent reported giving prophylaxis to one or more individuals. Almost 2,000 unequivocal congenital heart cases were under observation by the physicians replying. At least 0.5 cases of acute rheumatic fever per 1,000 population under 15 years of age were treated during the year. In the total population (all ages) of the state, at least 0.5 cases per 1,000 population were receiving some form of prophylaxis against rheumatic fever, with a similar rate for cases of unequivocal congenitial heart disease under observation. Since these rates are based upon replies from less than one fourth of the physicians (medical and osteopathic) in the state, it seems quite likely that the rates are substantially higher than those given, and quite possibly may be several times as high.

These data were obtained from 27.4 per cent of all physicians queried, omitting those retired or disabled that replied. These figures give the following incidence rates as of the population figures of the 1950 census. There were at least 0.25 cases of active rheumatic fever in all ages per 1,000 population. There were at least 0.50 cases of active rheumatic fever per 1,000 population under the age of 15 years in the state. There were at least 0.50 individuals per 1,000 population receiving some form of prophylaxis against rheumatic fever. Finally, the survey indicated there were at least 0.47 cases of unequivocal congenital heart disease per 1,000 population present and under the observation of a physician at the time of the survey.

University of Missouri School of Medicine

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E. B. ROBICHAUX, M.D., ***Excelsior Springs***

"Oral Anticoagulant Therapy Is Only as Good As Its Laboratory Control"

The need for standardization of a technic for prothrombin time determinations is emphasized and a means by which this can be done is explained. Results of consecutive blood plasma prothrombin determinations made by two separate laboratories are given.

Dr. Robichaux is a graduate of Tulane University College of Medicine and interned at Kansas City General Hospital. He is in an office with Drs. E. C. Robichaux, George E. Sanders and Ralph L. Nicholson, in which office some of the testing was done.

THE MONUMENTAL work and writings of Dr. Irving S. Wright, and others, have given emphasis to the value of anticoagulant therapy in various types of cardiovascular disease. The when, how, and why of its proper application and control has resulted in chaotic confusion, principally because of certain difficulties inherent in its use. As a result the general acceptance of anticoagulant therapy has been retarded.

We have applied ourselves to the task of helping make long-term anticoagulant therapy more effective and generally accepted, and therefore this study was undertaken. For example, in the modern treatment of coronary occlusion of the middle-aged, and in certain arrhythmias with embolic phenomena, the advantage of the employment of long-term therapy is clearly indicated. In these conditions the basic process remains as a threat after the initial symptoms have subsided, and it is therefore desirable to prevent or delay the recurrences. *The most important challenge of today is proper standardization of a technic for a prothrombin determination which can be duplicated without too much difficulty or expenditure of money in any adequately equipped laboratory. Unless this is accomplished, long-term anticoagulation therapy will not be available to tens of thousands of patients who deserve and need it.*

After agreement as to what constitutes an effective therapeutic level, perhaps 25 to 38 seconds prothrombin time, it would be desirable for the value of the test to be universally reported in terms of *prothrombin time expressed in seconds, and not by percentage of normal prothrombin time activity.* There are several methods of determining the prothrombin activity in percentage, and this in itself creates confusion. One method is by the preparation of a standard curve by the determination of prothrombin times on samples of plasma diluted with saline. If a sample containing equal parts of normal plasma and saline gives a prothrombin time of 50 seconds, then a test plasma with the same clotting time is reported as 50 per cent prothrombin. In practice it has been demonstrated that the standardization curve is not a true reflection of the prothrombin concentration. The reason is that dilution affects not only the prothrombin concentration, but also the accessory plasma factors needed for the conversion of prothrombin to thrombin. When large amounts of saline are added to the plasma, some of the accessory factors may be diluted out of effective existence whereas other factors are still present in significant concentrations. As a result, it is unrealistic to compare the clotting time of the patient's plasma where variation is physiologically controlled with the clotting times of artificially-diluted plasma. Attempts have also been made to prepare a standard curve by diluting normal plasma with prothrombin-free plasma. However, no one as yet has been able to prepare a prothrombin-free plasma which is completely normal in all other respects. *This is the main reason most all the leaders in the field of anticoagulant therapy,* including Dr. Joseph E. Flynn,[1] *now report the prothrombin time in seconds.*

The contraindications to anticoagulant therapy are sufficiently well known so that they will not be enumerated in this report. Full consideration must be given to them before initiating treatment. The cooperation of the patient is essential for this.

Different thromboplastin preparations, with varying controls, yield differences in control time values, but in actual practice the only information the usual control test gives is to indicate the activity and sensitivity of the particular thromboplastin being used. This is, however, essential. It should not vary in excess of 1 second. *If another control could be provided in the therapeutic range of about 32 seconds, a variation of 1 to 2 seconds would be satisfactory. By reading this control daily a check on the accuracy of the particular laboratories' test technic could be further evaluated. We believe this would materially improve the opportunity for national standardization of a technic.*

Three factors are vital to the successful implementation of this therapy.

I. The selection of an anticoagulant drug which, when given in suitable dosage, will reach optimal levels at the earliest possible moment. Thereafter the level should be controllable by day to day observations and, if necessary, changes in the dosage. Of these Acenocoumarin,[a] Phenindione,[b] and Warfarin Sodium[c] have, in our hands, proven most acceptable. These show quick dissipation of effect and quite predictable effect upon the prothrombin time in most cases. The dosage for patients concurrently receiving salicylates, corticosteroids, ACTH, barbiturates, phenothiazines and, especially, broad spectrum antibiotics, must be controlled with particular care. Uncontrolled congestive heart failure has to be watched carefully to prevent the sudden absorption of heretofore unabsorbed anticoagulant drugs which might cause bleeding or toxic complications. Marked passive congestion of the liver may be a factor in these patients. Infrequent side effects of these drugs include vomiting, diarrhea, urticaria, maculopapular eruption, purpura and alopecia. Agranulocytosis has also been observed with the phenylindandione drugs. These complications are all extremely rare. It is noteworthy that in all patients treated by us in 1959 that were within a range of 50 seconds prothrombin time, according to technic herein described, had no significant clinical hemorrhage.

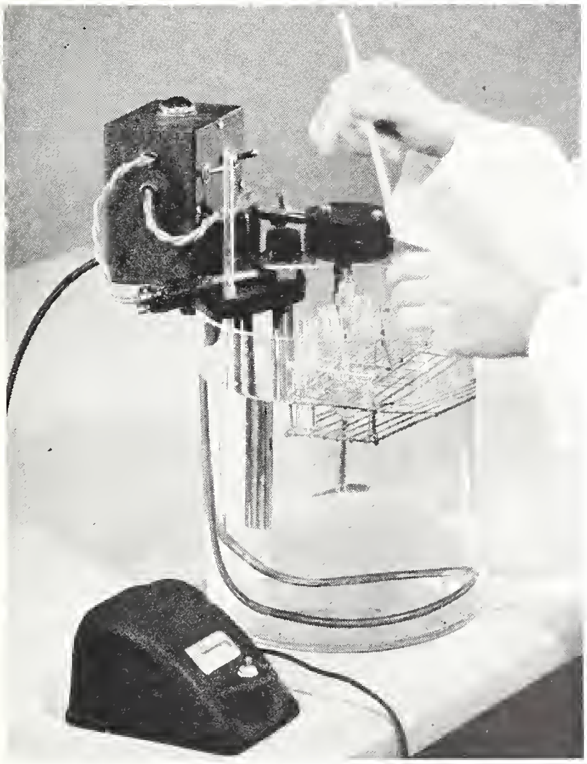

Fig. 1. Temperature water bath.

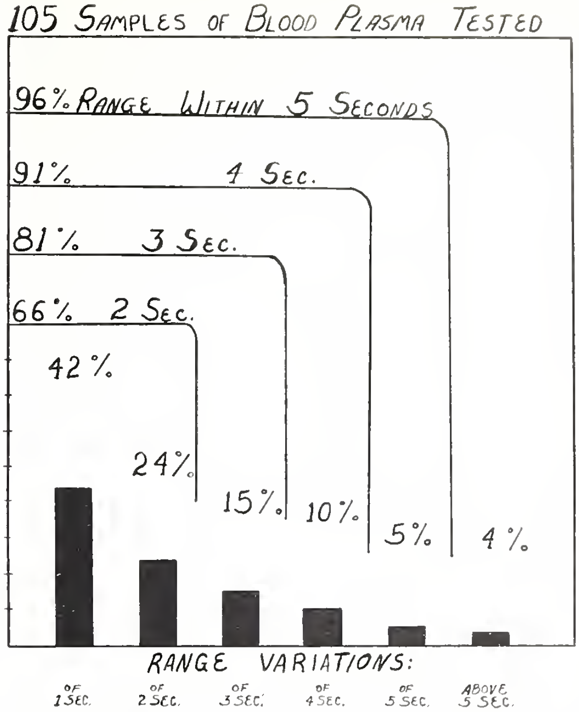

Fig. 2. Percentage of agreement of blood plasma prothrombin times done in two separate laboratories within range of varied times expressed in seconds.

II. It is necessary to select a commercially available thromboplastin having the quality of sufficient sensitivity, free of significant Factor VII activity, and with a definite easily visible endpoint. After considerable testing we have found Acuplastin[d] as the most satisfactory commercially available preparation. This is confirmed by Dr. Irving S. Wright,[2] who prepared the following statement for our use in this article:

"One of the weaknesses in the present use of anticoagulants lies in the wide differences in activity or sensitivity of the commercial thromboplastin preparations. In the vascular research laboratory at the Cornell University Medical College, we have been making comparative studies of a wide variety of thromboplastins during the past 13 years. Many preparations which react in a very nice way in the test tube and are therefore pleasing to the clinical pathologist are not equally satisfying to the clinician because they do not provide him with adequate warning of a change in the prothrombin, Factor VII and Stuart-Prower factor in the blood.

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[a] Sintrom—Geigy Pharmaceuticals.
[b] Hedulin—Walker Laboratories, Inc.
[c] Coumadin—Endo Laboratories, Inc.

[d] Acuplastin—Tissue thromboplastin, Ortho Pharmaceutical Corporation.

"Work done by Dr. Marc Verstraete in our laboratory indicates that it is probably better to use a thromboplastin which was made from lung rather than brain tissue. This is not absolute but brain tissue contains more active Factor VII which is one of the most important components you are testing for. We prefer a thromboplastin which has a control of 15 to 17 seconds and has an optimal therapeutic range of 22 to 35 seconds.

"The two commercial preparations which we have found to be most satisfactory are Acuplastin of Ortho and Aplastin of Difco. We use the Link-Shapiro modification of the Quick Test for these thromboplastins. If a faster thromboplastin is used with a control time of 12 or 13 seconds, it is wise to obtain the figures for both the whole and the 12½ per cent dilution test. The laboratory should always give the control figure for each day as well as the figure obtained from the patient's blood. This also protects the clinician by making him alert to irregularities in the test. In general the optimal therapeutic range is one and one-half to two times the normal control as stated in seconds."

III. The third vital factor in successful anticoagulant therapy is the use of an accurate technic for the prothrombin time determinations. It should ideally permit comparable results between one laboratory and another. This is necessary if national standardization of prothrombin time determinations is ever to be accomplished, and if anticoagulant therapy on a long-term basis is to become universally adopted. Before the test is undertaken the following technical

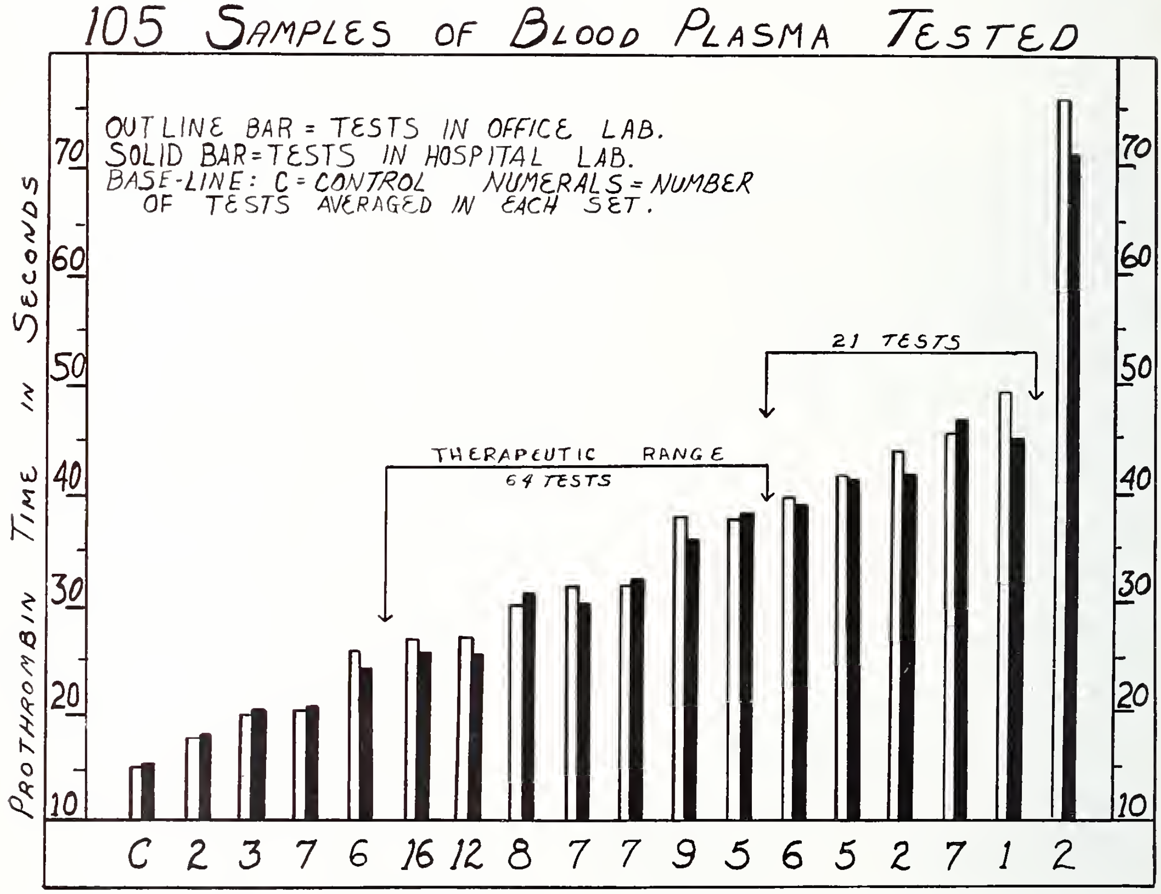

Fig. 3. Comparative results at varied levels of blood plasma prothrombin times done in two separate laboratories.

factors are essential: (1) acid cleansing and adequate rinsing of all glassware to be utilized; (2) the careful collection of the blood specimen, without contamination with tissue juices, using a two syringe method, if necessary; (3) the carrying out of the determination within one hour of the collection of the blood specimen; (4) the utilization of a properly controlled temperature water bath, with a stirrer in constant operation so as to permit only minimal changes in the temperature bath in which the test is performed. (A water bath which meets these standards is pictured in figure 1.) Many improvised water baths, and water baths used for other determinations, are not adequate for prothrombin time determinations; (5) an experienced technician who thoroughly understands the procedure, and whose visual acuity permits a reading of the prothrombin time on the appearance of the first fibrin changes; (6) the use of accurately standardized pipettes; (7) the use of a constant and adequate source of light from which to make the readings.

Presented herewith are results of a study of 105 samples of blood plasma, which were simultaneously tested in two laboratories, namely our office and that of the Excelsior Springs Hospital. Both are well equipped and competently staffed. These were collected and tests performed within one hour. They were carried out under rigid controls cited previously. No results were compared between the two sets of technicians. The results of this study are shown in figures 2 and 3.

They demonstrate that 96 per cent were within a range of 5 seconds, that 91 per cent were within a range of 4 seconds, and that 81 per cent were within a range of 3 seconds, that 66 per cent were within a range of 2 seconds, that 42 per cent were within a range of 1 second; and that the remaining 4 per cent were within a range of 6 to 14 seconds. It is noteworthy that in tests which were within the therapeutic range of 25 to 38 seconds all were within a range of 5 seconds, and that even with prothrombin time prolonged beyond therapeutic limits (as high as 80 seconds), the results were well within clinically satisfactory agreement. In only one set of tests of the 105 plasma samples tested was there possible opportunity for clinical confusion as to therapy indicated.

CONCLUSIONS

This presentation emphasizes the need for standardization of a technic for prothrombin time determinations, and the means by which this can be achieved. It urges universal acceptance of reporting tests in seconds. We advocate the use of long-term anticoagulant therapy in selected cases, and stress the importance of cooperative effort and understanding between various laboratories. The results of 105 consecutive blood plasma prothrombin determinations, each made by two separate and distinct laboratories, without the transfer of information, are presented. The results obtained show a clinical application in line with the statement of Dr. William A. Jeffers,[3] "Oral anticoagulant therapy is only as good as its laboratory control."

BIBLIOGRAPHY

1. Flynn, Joseph E., Professor and Chairman, Department of Pathology, School of Medicine, University of Missouri: Personal communication.

2. Wright, Irving S., New York, N. Y.: Personal Communication.

3. Jeffers, William A., Department of Medicine, Pennsylvania University, Regional Meeting, American College of Physicians, held in Philadelphia, 1959.

MISSOURI STATE SURGICAL SOCIETY TO MEET

The Missouri State Surgical Society takes pleasure in announcing its Third Annual Lectureship to be held Monday evening, March 14, 1960. The dinner meeting and lecture will be held in the Missouri Athletic Club, St. Louis, Missouri, starting at 6:30 p.m.

The speaker for this year's lecture is to be Dr. George Hallenbeck of the Mayo Clinic. His topic is "Surgical Treatment of Carcinoma of the Colon and Rectum."

Nonmembers of the Missouri State Surgical Society who wish to attend this dinner meeting and lecture please contact Dr. J. William Thompson, Medical Arts Bldg., 52 Maryland Plaza, St. Louis, for reservations.

CHARLES A. BRASHER, M.D., ***Mount Vernon***

Newton County Pilot Screening For Tuberculosis Control Through School Certification

Special Article

Dr. Brasher has reported a successful pilot screening for tuberculosis through school certification and with the cooperation of schools, students, citizens, the Division of Health and the physicians of the community. The success was based on the screening and skin testing of 94.7 per cent of the students in Newton County.

THEY SAID IT couldn't be done, but they did it. They made it possible to skin test and read 94.7 per cent of the students, 6,236 of 6,583 students enrolled, and 442 of the 443 adult personnel of 48 individual schools in Newton County. Who made it possible? The citizenry of Newton County, which had a population of 29,000 at the time of the 1941 census. Their cooperation in a plan that can be successful in every county in Missouri, was effective because they had sufficient vision and did not allow the amount of work involved to discourage or stop them.

The success of this program in Newton County shows what can be done when people cooperatively band together in an unselfish continuing service plan which will protect their children from a disease whose punch is at present underrated.

From a tuberculosis problem in one school in Newton County there was combined with it the desire to find a solution. From this focal center there developed an interest among teachers and school administrators to measure their individual tuberculosis problem in all the schools of the county. The local school boards and administrators of 48 school units in 42 school districts gave approval for the tuberculin testing program to be done in their schools. School boards made it their policy for all adult personnel to be tested. Two of the Newton County schools were under the supervision of boards of education in Lawrence and Jasper Counties, and these boards were quick with their approval.

Organized medicine gave its approval of skin testing as a case finding tool, and the school certification program of the American School Health Association as a method of tuberculosis control, and creating interest and activity in tuberculin testing. The chairman of the national committee on tuberculosis of the American School Health Association appointed a Missouri State Subcommittee in August, 1959 to supervise and to determine criteria for Missouri's own certification program, tailored especially for Missourians, so that a school may qualify for an "A" or "B" certificate good for five years.

Especially to be congratulated are the members of the Ozark Medical Society and the Southwest Osteopathic Society, who gave local endorsement and active support.

The physicians of Newton County deserve individual congratulations because, without their special contribution of personnel, time, services and chest films for positive tuberculin reactors, the program could not have succeeded.

It is hoped as the program grows that physicians can find time to continue to contribute a few hours to school screening, with the Division of Health furnishing only a part of the initial testing team to help assure uniformity of giving and reading tuberculins. Thus the results may be not only statistically uniform, but of true value for the patient and doctor in tuberculosis control.

All the associated groups and individuals deserve special recognition for the part they played in the team work in their program. The Division of Health thought of its own function as consultant.

School administrators, teachers and schools and Newton County public health nurses put much time into arranging suitable schedules. The community committees, school administrators, teachers, volunteer workers and students who assisted in handling rosters, checking of names at time of testing, are to be congratulated for their interest and faith in the program.

The executive committee of physicians worked closely with their local committees in each community, with a Missouri Division of Health educator assisting the executive committee of the county advisory board. The chairman was elected at a Newton County citizens' committee, after school and medical society approval. The chairmen of the local committees, appointed by chairmen and executive committees in 42 school districts along with the executive committee, made up the Newton County advisory board, a citizens' subdivision of the Missouri State Subcommittee on Certification. This group proved that genuine community interest and action, when properly organized and backed by the medical groups and schools can make certification a success.

The local county advisory board works closely with its present organization, the Missouri Subcommittee on Certification and other strategic associations, with which the American School Health Association usually works closely. The functions of the advisory board committees are such that a vast number of people must exhibit interest in others and show a willingness to join hands in a cooperative service. Such group work awakens interest and cooperation not only in tuberculosis, but in a total health awareness. The relative ease with which Newton County folk did the work shows that for others, and particularly for their children's health, they can rub shoulders in friendly cooperation. Remember, all decisions for action, and a major part of the work was done by Newton countians.

People in Newton County worked on committees serving the following functions: (1) Education and promotion, (2) physicians and other volunteer services, (3) records and materials, and (4) follow-up.

For this tuberculin test screening the Division of Health, Newton County Health Department, District Health office, Missouri State Sanatorium, and Neosho schools furnished personnel (physicians and registered nurses) for the school clinic and follow-up. The Newton County Health Department furnished materials such as alcohol, sponges, tuberculin and platinum needles.

The United States Public Health Service and the American School Health Association tuberculosis committee gave valuable consultation services, as did Dr. J. A. Myers, chairman of the National Committee on Tuberculosis of the American School Health Association, and Dr. M. L. Furcolow, Medical Director, Chief, Kansas City Field Station, Communicable Disease Center, Kansas City, Kansas.

Some explanatory material regarding the tuberculin test was used regarding the tuberculin test. It was obtained from the United States Public Health Service. Pamphlets were furnished without cost by the Missouri Tuberculosis Association for wide distribution in the county, and for teachers for class room instruction. The health educator from District No. 5 assigned to the project worked closely with the executive committee, nurse, and publicity chairman and joined them in talking to school personnel and civic groups. The Newton County full time public health nurses spent many hours to see that people were properly informed. Other literature was furnished by the Division of Health, as well as short film strips in color and black and white for television, movies and talks.

The educational program preparatory to the first testing early in November took a little more than eight weeks. It should not take less, according to Dr. J. A. Myers.

After the report of the tuberculin test was sent home by the student, Newton County and district public health nurses made home calls to talk to parents of the positive reactors among the students regarding the importance of going to their physician's office to complete the follow-up program. The family doctor who administered the tuberculin tests of immediate household contacts without cost and referred the positive reactors in the family, as well as the student reactor who led the family to the doctor, gave them a signed slip for use at one of the five x-ray facilities in the county without cost for this initial film only.

So that the plan may succeed as a state program, to rid Missouri of the tuberculosis problem in its schools, we cannot afford to initiate this program in occasional or isolated schools. Each time, for effectiveness, efficiency and for uniform results the tuberculin testing should be attempted on a county-wide basis.

The Newton County tuberculin screening activity is, as its originators (American School Health Association) intended, creating excellent interest in tuberculin testing, educating students in health habits, school personnel, the general public, and others regarding tuberculosis and how to find it before a person becomes ill or contagious.

These health habits, annual x-rays of positive reactors and repeat skin tests at least every two years of negative reactors (preferably annually), will be established through a continuing program. For this continuing program to succeed

Rules and Regulations of the State Board of Registration for the Healing Arts

The State Board of Registration for the Healing Arts was appointed by the Governor on September 4. The members are Walter S. Sewell, M.D., Springfield; D. Elliott O'Reilly, M.D., St. Louis; Ralph Perry, M.D., Kansas City; H. O. Loyd, M.D., Jefferson City; W. F. Francka, M.D., Hannibal; Richard A. Michael, D.O., Jefferson City, and R. W. Mathemy, D.O., Chillicothe.

Early in January the Board adopted rules and regulations which follow:

Rule No. I. Applicants for Licensing by Examination

(a) Moral Character

The applicant shall furnish satisfactory evidence as to his good moral character, including acceptable evidence that he or she is; 1) a citizen of the United States, 2) a certificate of recommendation as to applicant's moral and professional qualifications from two licensed physicians and surgeons of his acquaintance.

(b) Preliminary Education

1) Applicant must furnish a certificate of graduation from an accredited high school, 2) satisfactory evidence of completion of preprofessional education consisting of a minimum of 60 semester hours of college credit in acceptable subjects from a reputable college or university approved by the Board.

(c) Professional Education

1) The applicant must furnish satisfactory evidence of having attended throughout at least four terms of thirty-two weeks of actual instructions in each term and of having received a diploma from some reputable medical college or osteopathic college that enforces requirements of four terms of thirty-two weeks for actual instruction in each term, including, in addition to class work, such experience in operative and hospital work during the last two years of instruction as is required by the American Medical Association and the American Osteopathic

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there must be strong, continuing, active cooperation as long as we have schools and a single positive tuberculin reaction. The Newton County executive committee and advisory board have agreed to continue as a permanent advisory group to provide stimulus and spearhead the necessary retesting and assist in other tuberculosis control work.

The program, with its endorsement by organized medicine, has the approval of the Missouri Parent Teachers' Association and Missouri Tuberculosis Association Executive Committee. The board of directors of the Academy of General Practice has given verbal endorsement.

Dr. J. A. Myers says: "Missouri's Newton County work is probably the most intensive consecutive and effective effort in intradermal skin testing yet done where skin testing of pupils of all grades and adult personnel was done in every school."

Following is a summary of results of testing to date:

Total students in county	6,583
Total students tested and read	6,236
Per cent of total students tested and read	94.7
Total adult school personnel in county	443
Total adult school personnel tested	442
Per cent of positive reactors in students	2.999
Per cent of doubtful reactors in students	1.1
Per cent of positive reactors in employees	29.1
Total number of schools	48
Total number of schools certified	46
Schools qualifying for Class "A" certificate	31
Schools qualifying for Class "B" certificate	14
Schools not eligible for certification	3
Schools with 100 per cent testing and reading	16

The intradermal tuberculin test used is the intermediate strength PPD., i.e., 0.0001 mg. obtained by injecting 0.1 cc. of a solution so mixed to contain 0.001 mg. per cc.

Association before the college is approved and accredited as reputable.

(d) Certificate in Lieu of Examination

Upon proper showing the State Board of Registration for the Healing Arts may accept the certificate of the National Board of Medical Examiners of the United States, chartered under the laws of the District of Columbia, of the National Board of Examiners for Osteopathic Physicians and Surgeons, chartered under the laws of the State of Indiana, in lieu of and as equivalent to its own professional examination, upon proper application and $25.00 fee.

(e) Foreign Graduates

1) The Board does not necessarily accept the operative and hospital work of any school outside the United States and Canada; therefore, any applicant from foreign schools may be required to have a year's internship in a hospital in the United States approved for intern training by the Board before making application for examination.

2) Such an applicant must appear in person before the Board with their credentials in the original form with translated copy of each attached thereto, and shall be verified to the Board by the school of graduation direct, or documents bearing such evidence shall be visaed by the U. S. Consul in the country wherein the school of graduation is or was located.

3) Such an applicant is required to get a certificate from the Educational Council for Foreign Medical Graduates before making application for examination.

4) Medical colleges in Canada are not considered foreign schools by the State Board of Registration for the Healing Arts.

Rule No. II. Application Forms

(a) The applicant is required to make application upon a form prepared by the Board.

(b) No application will be considered unless fully and completely made out on the specified form and properly attested.

(c) An applicant shall present with the application two recent unmounted photographs, in size not larger than 3½ by 5 inches, on the back of which there shall be a certificate signed by the Dean of the professional school or by two licensed physicians and surgeons certifying that the same is a genuine photograph of the applicant.

(d) Applications shall be sent to the Executive Secretary of the State Board of Registration for the Healing Arts, Jefferson City, Missouri.

(e) The board shall charge each person applying to and appearing before it for examination for certificate of licensure to practice as physician and surgeon, a fee of twenty-five dollars, $12.50 of which is for taking Part I of the examination and $12.50 of which is for taking Part II of the examination. (When Part I and Part II are taken separately a fee of $12.50 shall be collected for each at the time application is made.) The fee shall be sent in the form of a bank draft, post office money order or express money order. (Personal checks will not be accepted.)

(f) Professional diploma shall be sent to the Executive Secretary of the State Board of Registration for the Healing Arts for verification. Photostatic copies of same may be accepted at the discretion of the Board.

(g) When an applicant has one or more years in a preprofessional or professional institution other than the one from which he is a graduate, he must file with this application a statement under seal from those institutions showing time spent and credit he received.

Rule No. III. Examinations

(a) The examination will be given in two parts. Part I will include, Anatomy, Histology, Pathology, Physiology, Bacteriology or microbiology, Biochemistry, Physical diagnosis, Sanitation and Hygiene, and Part II shall include, Medicine, Surgery, Obstetrics, Gynecology and Pediatrics.

(b) Part I may be given at the end of the second or third year but will not be given separately to those eligible to take Part II.

(c) The Executive Secretary will notify applicants of the time and place examinations are to be held as soon as practicable.

(d) Applicants must provide their own pen and ink to be used in writing the examination. Paper and other material will be furnished by the State Board of Registration for the Healing Arts.

(e) All applications for examination must be filed in the office of the Executive Secretary thirty (30) days prior to the date of the examination.

(f) Any applicant detected in seeking or giving help during the hours of the examination, will be dismissed and his papers cancelled.

(g) Any applicant taking all of the examination at one time, if he fails Part I and passes Part II, he will have to repeat the full examination. If the applicant passes Part I and fails Part II, he would only repeat Part II of the examination.

Rule No. IV. Licensing by Reciprocity

(a) Moral Character

The applicant shall furnish a recommendation from either the applicant's medical or osteopathic society or in case the applicant has not practiced, a letter of recommendation from the Secretary of the Staff where he was a house officer, meaning either intern or resident.

(b) Preliminary Education

1) Applicant must furnish a certificate of graduation from an accredited high school. 2) Satisfactory evidence of completion of preprofessional education consisting of a minimum of 60 semester hours of college credit in acceptable subjects from a reputable college or university approved by the Board.

(c) Medical Education

1) The applicant must furnish satisfactory evidence of having attended through at least four terms of thirty-two weeks of actual instruction in each term of a professional college recognized as reputable by the Board and of having received a diploma from a professional college recognized as reputable by the Board. 2) The Board of Registration for the Healing Arts recognizes any professional school as reputable that is approved by the American Medical Association or the American Osteopathic Association at the time of the applicant's graduation.

(d) Licensing by Reciprocity

Applicants for licensing by reciprocity, who have been successfully examined by any professional Board considered competent by the Missouri State Board of Registration for the Healing Arts and having received grades not less than those required by the Statutes of Missouri and holding certificates as physicians and surgeons in any state or territory of the United States or the District of Columbia, and, in addition, presenting to the Board satisfactory certificates that they in every way fulfilled all the scholastic and other requirements of the Missouri State Board of Registration for the Healing Arts, may at the discretion of the Board upon proper showing to the State Board of Registration for the Healing Arts, receive from the Board a license to practice as physicians and surgeons in the State of Missouri without further examination. Such applicants may be required to appear in person before the Board.

(a) The applicant is required to make application upon a form prepared by the Board.

(b) No application will be considered unless fully and completely made out on the specified form properly attested.

(c) An applicant for reciprocity shall present, attached to the application, a recent photograph, in size not larger than 2½ by 5 inches, properly identified by the Secretary of the State Board in the State in which he is licensed.

(d) Applications shall be sent to the Executive Secretary of the State Board of Registration for the Healing Arts, Jefferson City, Missouri.

(e) The fee for reciprocity which is one hundred ($100.00) shall accompany this application. The fee shall be sent in the form of a bank draft or post office money order or express money order. (Personal checks will not be accepted.)

(f) Professional diploma, state certificate and a letter from a professional society, shall be sent to the Executive Secretary of the State Board of Registration for the Healing Arts for verification. Photostatic copies of same may be accepted at the discretion of the Board.

(g) When an applicant has filed his application and fee of one hundred dollars ($100.00) for license by reciprocity and the application is denied by the Board or subsequently withdrawn by the applicant, fifty dollars ($50.00) of the fee will be retained by the State Board of Registration for the Healing Arts as service charge.

Rule No. VI. Lost License

A certificate of lost license will be issued by submitting sufficient proof that a license has been heretofore issued to practice medicine and surgery, osteopathy and surgery, or as a physician and surgeon in the State of Missouri, that this license has been lost, and upon payment of a fee of ten dollars ($10.00).

Rule No. VII. Endorsement

The Board will supply endorsements of a licensed practitioner's qualifications on proper application forms upon the payment of a fee of ten dollars ($10.00).

Rule No. VIII. Examination Papers

Examination papers will be kept on file in the office of the Executive Secretary for a period of three (3) years.

Rule No. IX. Annual Registration Penalty

The annual registration fee will be $2.50 with 50 cents penalty per month for late registration but at no time shall a doctor be required to pay more than $25.00 in back fees for registration.

Rule No. X. Temporary Permit to Work in State or City-Supported Mental or Tuberculosis Hospitals

1) Any applicant who declares his intention to become a naturalized citizen and who registers

(Continued on page 382)

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effectively extends the medical control of edema or ascites.
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It is fully expected that Aldactone will change present medical concepts of the therapeutic limitations of managing edema. Many patients living in a greater or lesser state of edematous invalidism can now be edema-free. To others, gravely ill, Aldactone will be life-saving.

When used alone, Aldactone will produce a satisfactory diuresis in about half of those patients whose edema is resistant to conventional diuretic agents.

When Aldactone is used in a comprehensive therapeutic regimen, which includes a mercurial or a thiazide diuretic, a satisfactory diuresis and relief of edema may be expected in approximately 85 per cent of edematous patients *who would not otherwise respond.*

DOSAGE: For most adult patients the optimal dosage of Aldactone, brand of spironolactone, is 100 mg. four times daily. Aldactone should be administered for at least four or five days before appraising the initial response, since the onset of therapeutic effect is gradual when it is used alone. Aldactone manifests accelerated activity with greater response as early as the first and second days when used in combination with a mercurial or thiazide diuretic.

SUPPLIED: Aldactone is supplied as compression-coated yellow tablets of 100 mg.

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Research in the Service of Medicine

Ralph Perry, M.D.

President's Message

Delegates and Alternates to the 102nd session of the House of Delegates again have received a handbook, committee reports and the report of the Council. Because of the early date of the meeting, it was not possible to get these into the hands of members of the House as early as in some years. However, the Delegates do have them and members are urged to talk to their Delegates prior to the session and go over the material with the Delegate.

While members are welcome to attend the House of Delegates, the floor is open only to Delegates and Committee Chairmen and Officers, although members may address Reference Committees.

Most good can be gotten through the House of Delegates if members are in reality represented by their Delegates, if the Delegate knows the feeling of the membership of his component society.

Make an opportunity to talk with the Delegate from your Society, find out what the committees are reporting, what the Council will recommend to the House and make it a really representative meeting for the full membership.

Ralph Perry

EDITORIALS

THE 102ND ANNUAL SESSION

Refresher courses, a clinical pathologic conference, a panel on medical economics, symposia on modern concepts of treatment of arteriosclerotic heart disease and on accidents in children and many individual presentations on various phases of medicine will be on the program of the 102nd Annual Session.

The session will be held at the Sheraton-Jefferson Hotel, St. Louis, March 13, 14, 15, 16, 1960. The program probably has more variety of interest than programs for many years.

Aside from the scientific part of the meeting, many problems of medicine today will be discussed in the sessions of the House of Delegates.

The session will open with the meeting of the House of Delegates, Sunday afternoon, March 13 at 1:30 p.m. The House will meet again at 4:30 p.m. on Monday afternoon and hold its final session at 1:30 p.m. on Wednesday afternoon, March 16.

On Sunday evening the Woman's Auxiliary will again have their social hour and buffet supper with entertainment.

On Monday evening, the Missouri State Surgical Society will hold a dinner meeting at the Missouri Athletic Club. The Committee on Diabetes and the Missouri Diabetes Association will hold a dinner meeting Monday evening at the Sheraton-Jefferson Hotel. The St. Louis Gynecological Society will have a dinner meeting Monday evening at the Mayfair Hotel.

The Committee on Maternal Welfare will hold a luncheon meeting Monday noon and the University of Missouri Medical Alumni will meet for lunch on Tuesday.

For the Banquet in Honor of Past Presidents to be held on Tuesday evening, Representative Bruce Alger will be the speaker. He will speak on "Why You Should Take an Active Part in Civic Affairs." Representative Alger, a member of the Ways and Means Committee of the House of Representatives, is Congressman from the Fifth District, Dallas County, Texas.

Mr. Alger was born in Dallas, Texas, but was educated in the public schools of Webster Groves, Missouri, and won a academic scholarship, the Blossom Award, to Princeton University, where he was graduated in 1940.

Mr. Alger was elected to Congress in 1954 as the first Republican to represent Dallas County. He served first as a member of the Committee on Public Works. Following reelection in 1956, he was named to the important Interstate and Foreign Commerce Committee. Elevated to the powerful Ways and Means Committee in 1959, Mr. Alger's Congressional efforts have centered around the Hoover Commission recommendations, fiscal responsibility and efforts to trim the size and scope of federal government. His two "yardsticks" to measure the worth of any proposal are now quite well known in Dallas and in Washington: (1) "Is it a function of the federal government?" (2) "Can we afford it?" Adhering rigidly to these guidelines, Mr. Alger has established a reputation in Congress as one willing to vote from conviction and without regard to party lines or political currents at home.

Physicians who have been in practice for 50 years will be honored along with Past Presidents at the banquet.

50TH ANNIVERSARY OF FLEXNER'S STUDY

The 50th anniversary of the publication of the results of a two-year study of American medical schools by Abraham Flexner, Sc.D., was observed during the Medical Education Congress held in Chicago, February 7 to 9.

Dr. Flexner's study was made in 1910 at the request of the A.M.A.'s Council on Medical Education and of the Association of American Medical Colleges. The report is credited with showing deficiencies in many U. S. medical schools then in existence, closing many and bringing about improvements in others.

The morning session on February 8 was dedicated to Dr. Flexner who died last September at the age of 92. Lewis L. Strauss, former chairman of the Atomic Energy Commission and the current president of the Institute for Advanced Study, Princeton, N. J., addressed the Congress on "The Lasting Ideals of Abraham Flexner." Dr. Flexner founded the Institute in 1930 and was its first director.

The Congress is sponsored by the American Medical Association's Council on Medical Education and Hospitals, the Advisory Board for Medical Specialties, and the Federation of State Medical Boards of the United States. The role of the patient in medical education was a highlight of the discussions at the Congress.

Ramblings of the Field Secretary

The 125th Annual Meeting of the St. Louis Medical Society on January 5 was another memorable occasion for those fortunate enough to have been present. Dr. Robert Bassett, retiring President, turned over the gavel, with his best wishes and pledged cooperation, to the new President, Dr. Paul F. Max. As his first official duty Dr. Max presented the Past President's Key to Dr. Bassett and expressed the gratitude of the membership for the dedicated service of the retiring President.

Dr. Bassett presents gavel to Dr. Max.

In his remarks as retiring President, Dr. Bassett reviewed various Society activities during the last year. He said that most successful and rewarding was a special program devoted to the prevention and treatment of athletic injuries. Many high school coaches and athletic directors of St. Louis area high schools attended this meeting. He remarked that it was the opinion of all concerned that it was a valuable experience and should be made a regular scheduled event.

New officers stood in receiving line.

In his Inaugural Address Dr. Paul Max set forth strong arguments against the Forand Bill presently in the Committee in Congress. He pointed out that in many individual cases, those over 65 are better able to afford medical care than those under that age. Furthermore, he said that since physicians give professional services free to those who cannot pay, it is obvious that the number of senior citizens faced with a significant health care problem must be small.

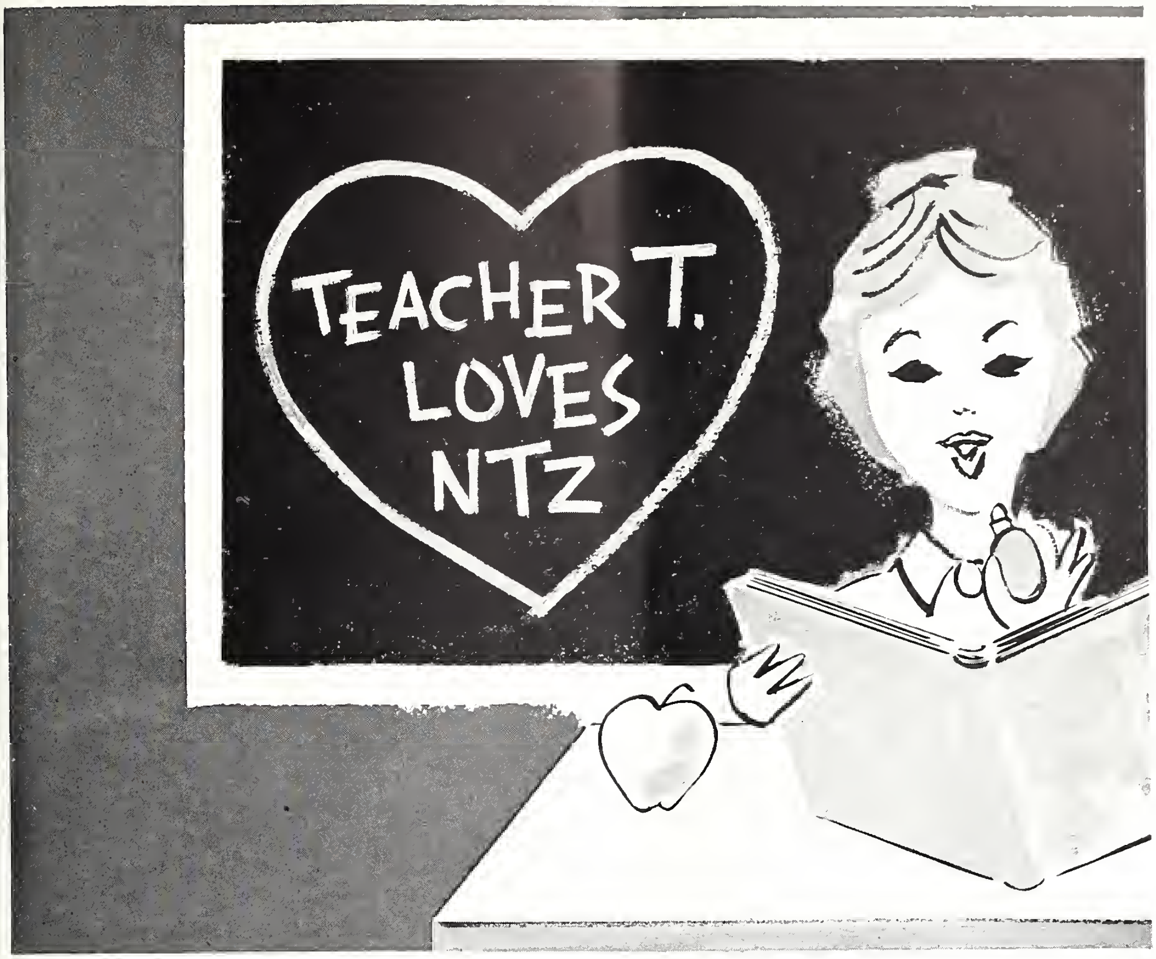
Dr. Max in discussing a drop in the number of applicants for medical schools in the last few years, because of the time and expense of a medical education, suggested the government might well give a tax credit for students while in medical school instead of direct financial assistance, which some people support.

Dancing was a part of the evening festivities.

Other officers installed included Drs. Don C. Weir, President-Elect; Leo J. Hartnett, Vice-President; Charles S. Sherwin, Secretary; Roy V. Boedeker, John J. Hammond, James M. Macnish, Richard W. Yore, Councilors (three-year term), and Dr. Charles O. Metz (one-year term).

Following the installation ceremonies, under the direction of the Woman's Auxiliary, an officers' reception was held in the banquet room. Refreshments were served and many took advantage of the opportunity for dancing.

Quinlan's Party House, 7817 Clayton Road, Clayton, housed the impressive ceremonies of the 1960 Installation of Officers of the St. Louis County Medical Society on Wednesday evening, January 13. A period of "socializing" preceded a bountiful dinner and the evening's formal pro-



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gram. Strolling musicians added much to the tenor of the evening's festivities. The tables were all appropriately decorated by members of the Woman's Auxiliary.

The retiring President, Dr. Robert Kingsland, in his remarks set forth in a most entertaining and witty fashion numerous observations on the difficulties and problems associated with the position of President of the St. Louis County Medical Society. He also mentioned a few of the pleasures such as the privilege of working closely with other doctors, Auxiliary members and staff personnel on society matters.

Dr. Kendis presents Past President's Key to Dr. Kingsland.

Dr. Joseph Kendis, the incoming President, following his installation presented a Past President's Key to Dr. Kingsland. At this point in the ceremonies, a silver candelabra was given to Dr. and Mrs. Kingsland as a gift from the Society. Bound copies of the 1959 Society *Bulletin* were presented to Drs. Joseph Kendis, Richard Sutter and Robert Kingsland in recognition of their outstanding contributions to the *Bulletin*.

Dr. Kendis introduces President-Elect, Dr. Wulff.

Dr. Kendis in his inaugural remarks laid much stress on physicians assuming their proper share of citizenship responsibilities. He pointed out the necessity of letting our representatives in Congress know why the Forand Bill would produce inferior medical care for all.

A large group enjoyed the meeting.

Other new officers introduced were: Dr. George J. L. Wulff, President-Elect; Dr. James Nakada, Vice-President; Dr. Robert Hughes, Secretary; Dr. Raymond Mezera, Dr. John Roberts and Dr. Edmund Cowdry, new council members.

CHEST PHYSICIANS WILL MEET

The Missouri Chapter of the American College of Chest Physicians will hold its annual meeting in St. Louis during the annual session of the Missouri State Medical Association, on Sunday, March 13, at the Statler Hotel beginning at noon.

The program, announced by Dr. Ellis S. Lipsitz, St. Louis, Chapter President, is as follows:

"Lung Biopsy in the Diagnosis of Diffuse Infiltrative Pulmonary Disease," Peter A. Theodos, M.D., Philadelphia.

"Diagnosis and Management of Lesions Requiring Open-Heart Surgery," Thomas Ferguson, M.D., St. Louis.

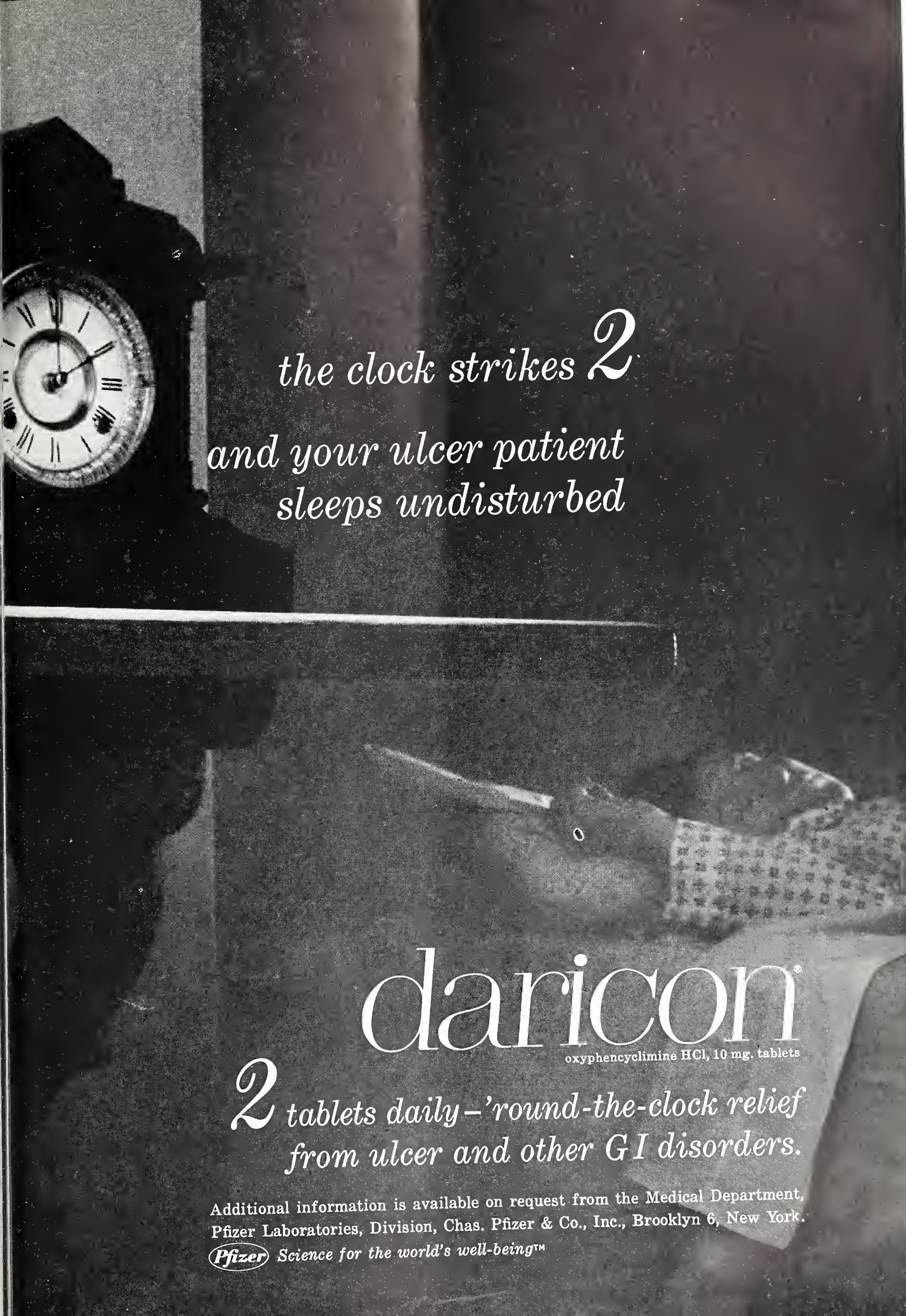
"Anthracosis—A Common Disease," J. P. Wyatt, M.D., St. Louis.

"Correlation of Pulmonary Function and Pathology in Emphysema," Herbert C. Sweet, M.D., St. Louis.

"Summary of 1960 Veterans Administration Tuberculosis Conference," William Klein, M.D., St. Louis.

"A Report on the Use of Cycloserine in Large Dosage in Salvage Cases of Tuberculosis," Axel Gronau, M.D., and Ellis S. Lipsitz, M.D., St. Louis.

All physicians are cordially invited to attend the meeting. There is no registration fee.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News—Personal and Professional

A course sponsored by the Y.M.C.A. in St. Joseph for fathers and sons on health and sex education was conducted in two sessions by Drs. **John McDaniel** and **Caryl Potter.**

Dr. Patrick W. Luter, son of Dr. and Mrs. **Carter W. Luter**, Butler, has located in Durango, Colorado, following a four year surgical residency which was interrupted for two years during the Korean conflict.

Recently elected to the board of directors of the Greater St. Louis Hospital Council is **J. Earl Smith**, M.D., St. Louis.

An address on mental health was given at the St. John's United Church of Christ, St. Louis, recently by **George A. Ulett**, M.D., St. Louis.

The Baptist Memorial Hospital, Kansas City, was opened in January. Temporary officers of the staff are Dr. **D. M. Eubank**, president; Dr. **Joseph C. Williams**, vice president; Dr. **Herbert H. Virden**, treasurer, and Dr. **O. Dale Smith**, secretary.

It has been announced that Milford T. Kubin, M.D., will become administrator of the Ellis Fischel State Cancer Hospital, Columbia, on April 1. He is at present post surgeon at Ft. Riley, Kansas.

The Young Adult Group of Temple Israel recently heard a discussion of a program for the care of the aged by **I. J. Flance**, M.D., St. Louis.

New officers of the Missouri Methodist Hospital, St. Joseph, are Dr. **Manning E. Grimes**, president; Dr. **Thompson E. Potter**, president-elect; Dr. **John R. McDaniel**, vice president, and Dr. **Warren C. Baker**, Savannah, secretary-treasurer.

Staff officers of St. Elizabeth Hospital, Hannibal, recently elected are Dr. **R. J. Lanning**, president; Dr. **J. H. Walterscheid**, vice president, and Dr. **John Canella**, secretary.

On the twenty-fifth anniversary of the American Rheumatism Association, an award was presented to **Ralph A. Kinsella**, M.D., St. Louis. Dr. Kinsella was among the original members of the American committee of the International League against Rheumatism and the men who formed the American committee for the study and control of rheumatic and arthritic diseases.

The Rotary Club of Neosho was addressed by Dr. **L. T. Taylor** at a January meeting. Dr. Taylor discusses the tuberculosis testing program being carried out in Newton County.

Appointment of Dr. **Charles D. Osborne**, Sedalia, as new medical advisor for Selective Service Board No. 84, Pettis County.

In a Distinguished Leaders Lecture Series at McKendree College, Lebanon, Ill., **Wendell G. Scott**, M.D., St. Louis, was a recent speaker.

Speaker at a First Aid Group meeting in Lee's Summit recently was **Lyle B. Knight**, M.D., Lee's Summit.

The Moberly Business and Professional Women's Club had as speaker at a January meeting **Alfred K. Baur**, M.D., Fulton.

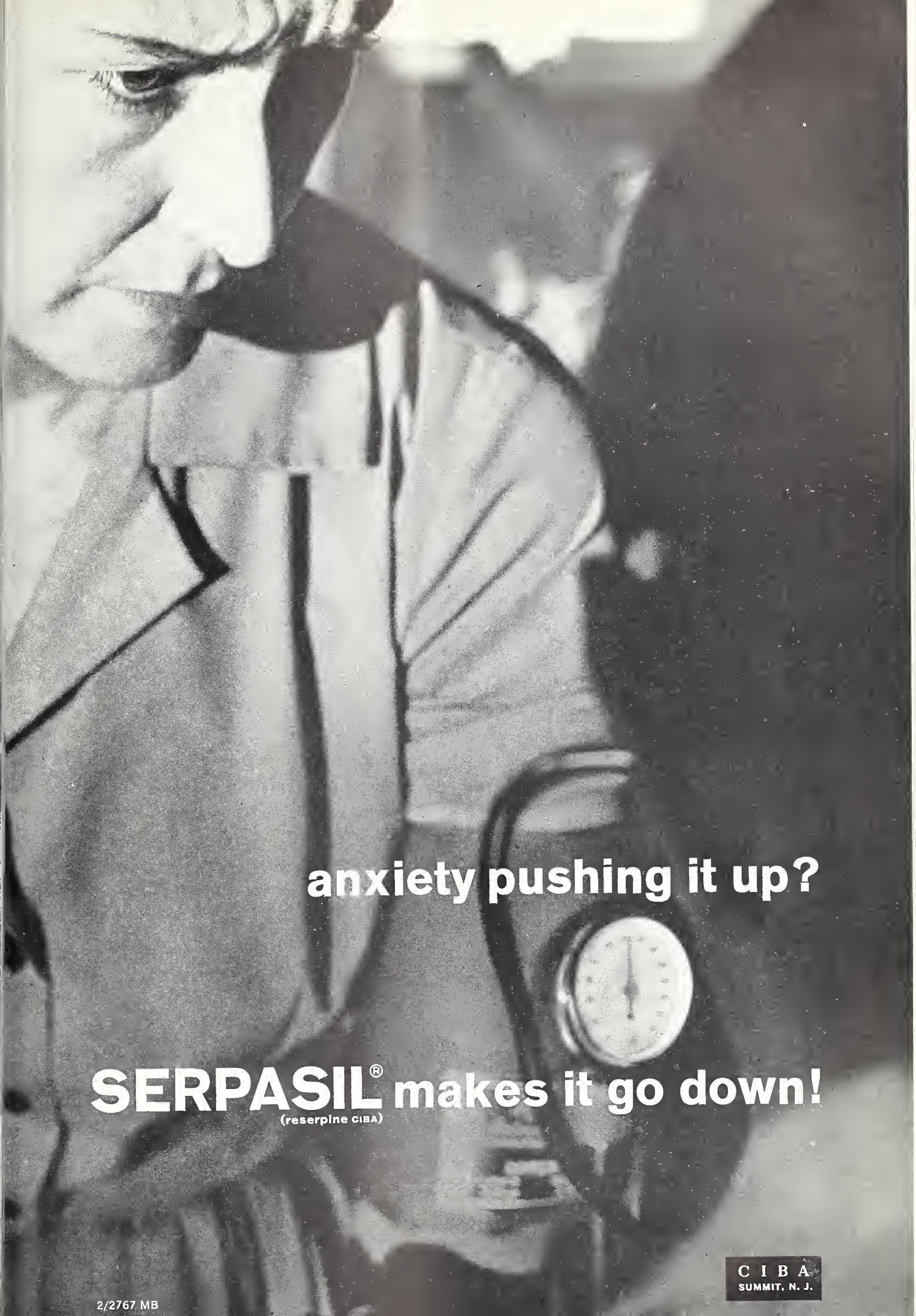
The staff of St. Francis Hospital, Maryville, has elected Dr. **Robert E. Dunshee** as president. Dr. **G. R. Wempe** is vice chief and Dr. **H. C. Bauman** is secretary.

Guest speaker at a meeting of the Joplin Board of Education Practical Nurses' Alumnae recently was **L. H. Lewis**, M.D., Joplin.

Recently elected officers of the Samaritan Hospital, Macon, are Dr. **Donald E. Eggleston**, president, and **Howard Miller**, vice president.

The Kansas City Star on January 17 carried a four column story about Dr. **L. S. Shumate**, Reeds Springs, who is "still on call" at 80 years of age.

"Emotional Problems of Elementary Children" was the subject of a discussion by Dr. **Robert**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Gauer and Dr. **Victor McDonald** at the Southwest Elementary School of Parkville, on January 12.

A participant in a panel discussion on "Epilepsy and the School Age Child" sponsored by the Greater Kansas City **Epilepsy** League was Dr. **E. Haydn Trowbridge**, Kansas City.

The Springfield Chamber of Commerce named **F. T. H'Doubler, Jr.**, M.D., Outstanding Young Man of the Year at its distinguished service award banquet in January.

The Board of Trustees of the Laclede County Health Center named **B. B. Hurst**, M.D., Lebanon, as part-time officer for the county at a meeting held late in January.

Durward G. Hall, M.D., Springfield, has resigned as president of the Missouri State Chamber of Commerce and will seek election to the Congress of the United States.

NEW MEMBERS

Watt O. Cowan, M.D., Greenfield, has become a member of the Barton-Dade County Medical Society. Dr. Cowan is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine, St. Louis, in 1930.

Edward M. Grim, M.D., 201 E. Patterson, Kirksville, has become a member of the North Central Counties Medical Society. Dr. Grim is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Tulane University, New Orleans, in 1956.

Waldo B. Isom, M.D., Knox City, has become a member of the North Central Counties Medical Society. Dr. Isom is a native of Illinois, received his preliminary education in Illinois, and his M.D. degree from St. Louis College of Physicians and Surgeons, St. Louis, in 1925.

James E. Jameson, M.D., Professional Bldg., Springfield, has become a member of the Greene County Medical Society. Dr. Jameson is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from University of Tennessee, Knoxville, in 1950.

Irving Kartus, M.D., 6155 Oak Street, Kansas City, has become a member of the Jackson County Medical Society. Dr. Kartus is a native of New York, received his preliminary education in New York, and his M.D. degree from University of Lausanne, Switzerland, in 1942.

Marian L. Lambert, M.D., 11610 So. No. 71 Highway, Grandview, has become a member of the Jackson County Medical Society. Dr. Lambert is a native of Missouri, received his preliminary education in New York, and his M.D. degree from Cornell University, Mount Vernon, Iowa, in 1943.

William E. Morehead, M.D., Kennett, has become a member of the Dunklin County Medical Society. Dr. Morehead is a native of Tennessee, received his preliminary education in Mississippi, and his M.D. degree from the University of Tennessee, Knoxville, in 1955. He interned at John Gaston Hospital, Memphis, Tennessee.

Mark Dean Ost, M.D., Kansas City General Hospital, Kansas City, has become a member of the Jackson County Medical Society. Dr. Ost is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from the University of Kansas School of Medicine, Lawrence, in 1958.

James L. Russell, M.D., 609 Professional Building, Kansas City, has become a member of the Jackson County Medical Society. Dr. Russell is a native of Oklahoma, received his preliminary education in Kansas, and his M.D. degree from St. Louis University School of Medicine, St. Louis, in 1949. He served a residency at Charity Hospital, New Orleans, Louisiana.

Clarence J. Shockley, M.D., 231 West 47th St., Kansas City, has become a member of the Jackson County Medical Society. Dr. Shockley is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from University of Kansas Medical School, Lawrence, in 1955. He served a residency at St. Lukes Hospital, Kansas City.

Bill D. Waddell, M.D., Smithville, has become a member of the Clay County Medical Society. Dr. Waddell is a native of Texas, received his preliminary education in Oklahoma, and his M.D. degree from University of Oklahoma, Norman, in 1956.

Charles B. Wilkinson, M.D., Psychiatric Receiving Center, Kansas City, has become a member of the Jackson County Medical Society. Dr. Wilkinson is a native of Virginia, received his preliminary education in Virginia, and his M.D. degree from Howard University College of Medicine, Washington, D. C., in 1944.

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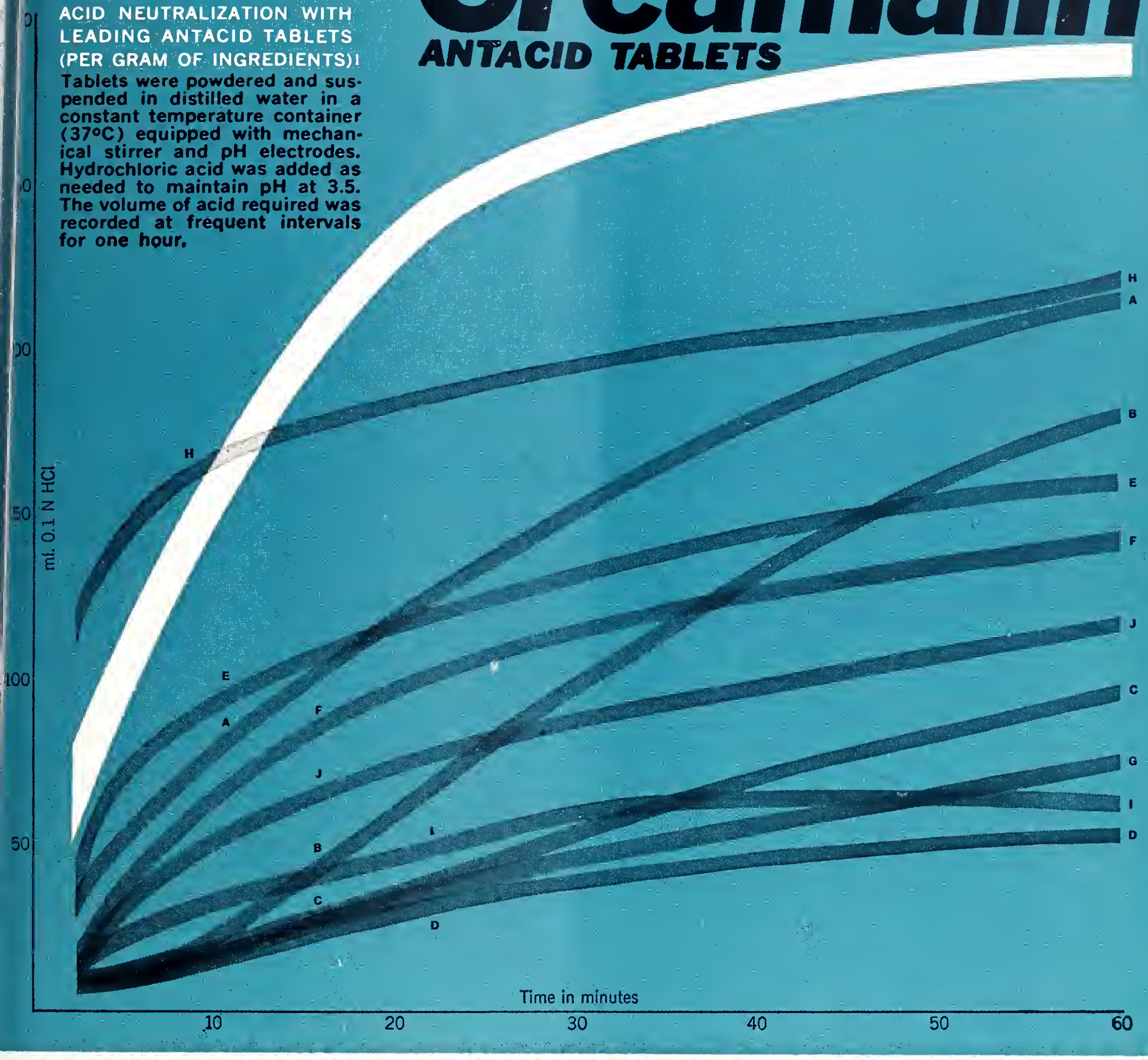

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1. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A. (Scient. Ed.)* 48:380, July, 1959. 2. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: *J. Am. Pharm. A. (Scient. Ed.)* 48:384, July, 1959.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL,
CHILLICOTHE, COUNCILOR

Buchanan County Medical Society

A meeting of the Buchanan County Medical Society was held in St. Joseph on Wednesday evening, January 6.

The special program for the evening was on the subject, "Use and Abuse of Antibiotics." This subject was discussed by a panel of members of the Society composed of Caryl A. Potter, Jr., M.D., internist, moderator; Robert W. Augustine, M.D., orthopedic surgeon; Robert Kieber, M.D., general practice; H. E. Petersen, M.D., pediatrician; Herbert L. Warres, M.D., neurologist, and Charles R. Willman, M.D., surgeon.

Each panelist discussed his subject from the viewpoint of his specialty with a summary given by Dr. Potter. A separate question and answer session followed the formal presentation.

Fifty doctors including guests from northwest Missouri and northeast Kansas attended the meeting. Dr. Thompson E. Potter, President of the Society, presided.

William B. Rost, M.D., *Secretary*

Grand River Medical Society

The Grand River Medical Society held their monthly meeting at the Strand Hotel in Chillicothe, on January 14. There were 31 guests, wives and members present.

Following dinner, the ladies retired to their meeting and the society was addressed by Moss Rudolf of Moss Rudolf Retail Credit Company on the topic of "Medical Insurance."

Following the program, there was a short business session. There was further discussion on ways of opposing the Forand Bill and what individual members could do to deal with this problem.

There being no further business, the meeting was adjourned.

B. D. Howell, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

J. J. WIMP, KIRKSVILLE, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Societies

A dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held at the Woodland Hospital in Moberly on Thursday night, January 14.

Dr. Howard Miller of Macon, President, presided. The scientific program for the evening consisted of the presentation of interesting and unusual cases by members of the Society. Cases were presented by Dr. G. W. Hawkins, Salisbury; Drs. C. C. Cohrs, T. S. Fleming and S. Szymanski, Moberly.

Those in attendance were Drs. Josephine Baker, W. D. Chute, C. C. Cohrs, J. W. Fleming, Jr., T. S. Fleming, L. E. Huber, C. C. Smith, S. R. Szymanski and R. H. Young, Moberly; C. C. Weger, Keytesville; J. E. Campbell, D. E. Eggleston, H. S. Miller and Carl Rinker, Macon; F. A. Barnett, Paris; F. L. Harms and George Hawkins, Salisbury; and P. V. Dreyer, Huntsville.

Josephine Baker, M.D., *Secretary*

Marion-Ralls-Shelby County Medical Society

A dinner meeting of the Marion-Ralls-Shelby County Medical Society was held at the Mark Twain Hotel in Hannibal on Tuesday night, January 19. Twenty-five doctors were present to hear a most interesting and stimulating discussion by Philip Hitchcock, M.D., associate professor of anesthesiology at the University of Missouri Medical School on, "Current Trends in Anesthesiology."

Dr. Hitchcock continued discussion after his presentation.

The extensive question and answer period following the formal presentation was evidence of the interest in this program.

In addition, the Society was pleased to have as a guest, Dr. Vernon E. Wilson, Dean of the University of Missouri Medical School. Mr. Ray

Dr. Wilson was a welcome guest.

McIntyre, Field Secretary of the State Medical Association, was also present.

Dr. John Middleton and Dr. Joe Martin of Louisiana were guest physicians present. There were also three anesthesists who were not doctors in attendance, two from Hannibal and one from Quincy, Illinois.

A short business session followed the scientific program.

Wyeth Hamlin, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Lincoln-St. Charles County Medical Society

Carl Almond, M.D., assistant professor of surgery at the University of Missouri Medical School, spoke at a dinner meeting of the Lincoln-St. Charles County Medical Society on Tuesday evening, January 19, at Station Duquette in St. Charles. His subject was "The Treatment of Metastatic Carcinoma of the Breast." His was an interesting and practical discussion of an important problem.

The evening activities began with a social hour followed by dinner and then the presentation of the program.

Paul Rother, M.D., *Secretary*

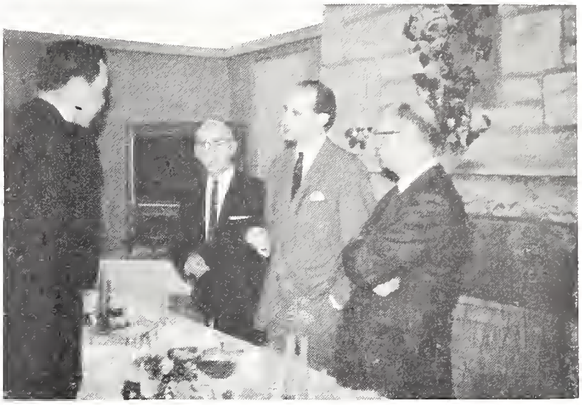
SIXTH COUNCILOR DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

Henry, Johnson, Pettis, Saline County Medical Societies

A joint dinner meeting of the Henry, Johnson, Pettis, Saline and adjacent county medical societies and the doctors' wives was held on Wednesday night, January 20, at the Starlite Club in Marshall.

The evening program began with a social hour at 6:30 p.m., followed by a bountiful dinner and then an unusually interesting scientific presentation. Dr. Robert A. Chandler, plastic surgeon, Kansas City, spoke on "The Management of Burns." He gave a practical presentation of this subject. A lively general discussion period followed the formal presentation. During the scientific program, the doctors' wives held a separate meeting with their own special program.



Dr. Chandler was the speaker.

The Saline County Medical Society made arrangements for the meeting and was pleased to note the fine turn-out of more than 50 persons, including doctors, their wives and guests, even though weather conditions were not as desirable as they might have been.

Wives and doctors had dinner together.

Mr. Ray McIntyre, Field Secretary of the State Association, was present and spoke briefly about the program for the annual Missouri State

Medical Association meeting at the Sheraton-Jefferson Hotel in St. Louis, March 13-16.

The next meeting of this joint group is planned for Sedalia in early March.

Robert Blalock, M.D., *Secretary,*
Saline County Medical Society

West Central Missouri Medical Society

The West Central Missouri Medical Society held its regular monthly meeting on Thursday evening, January 14, in Harrisonville. Members of the Society and their wives were guests in the lovely suburban home of Dr. and Mrs. O. B. Barger, for a social hour in honor of the State Association President, Dr. Ralph Perry, and his charming wife from Kansas City.

Following this most pleasant social hour, the members and their wives were served a splendid steak dinner at Hotel Harrisonville. After dinner the Society President, Dr. James Pascoe, of Nevada, introduced those officers who had been elected to serve the Society for the present year. The new Secretary presented some comments regarding the 1959 December meeting and made suggestions for handling business and financial matters of the Society. He suggested payment of dinner fees on entering the dining room to save time and embarrassment for the Secretary in collecting at the tables. Guests were then introduced.

Dr. Perry was the speaker.

Mr. Swanson, of Wyeth, Inc., was present for the meeting. Many speakers for the programs are sponsored by the Missouri Academy of General Practice and funds are received from Wyeth to aid in these Academy postgraduate endeavors. Mr. Ray McIntyre, Field Representative of the State Association, was present and made some timely remarks regarding some of the problems coming before the next meeting of the State Association in St. Louis, March 13-16.

The President then introduced the guest speaker, Dr. Ralph Perry, President of the State Medical Association, who presented a timely address on "Important Matters of Legislation," which will likely be considered during this session of Congress. He went into some detail in discussing the Forand Bill, which is now under consideration in committee. His information was most apropos and helpful to many of us who have thought we were too busy to find time to learn just what the passage of this proposed legislation would mean to patients and their physicians. His discussion of this important matter should certainly inspire us to let our Senators, Congressmen and patients know why we oppose this bill. We enjoyed Dr. Perry's presentation of this important message and were honored with his and Mrs. Perry's presence at our meeting. It is hoped that they will return to visit us again.

Dr. Roy Pearse moved that the March meeting be cancelled because the date would be too close to the State Medical Association meeting. The motion was seconded by Dr. Wray and unanimously passed. The next meeting will be held in Butler at the Inn Hotel on February 11 with the usual social hour beginning at 6:30 p.m.

Those present included our honored guests of the evening, State President and his wife, Dr. Ralph Perry of Kansas City; Field Secretary and traveler, Mr. Ray McIntyre of the State Association office; Mr. Swanson of Wyeth, Inc., and the following members and their wives: Dr. Rolla B. Wray and wife; Dr. James Pascoe, Dr. Roy Pearse, Nevada; Dr. Robert Magee and wife, Eldorado Springs; Dr. Herbert Tracy and wife, Belton; Dr. O. B. Barger and wife; Dr. Edward Jones and wife; Dr. Jack Moody and wife, Harrisonville; Dr. Robert Brownsberger and wife, Appleton City; and Dr. C. W. Luter, Butler.

The meeting adjourned at 10:15 p.m.

Carter Luter, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Jasper County Medical Society

A regular meeting of the Jasper County Medical Society was held on January 12, at Henry's Seventh and Rangeline, Joplin, Missouri.

The meeting was called to order by the President, Irwin T. Craig, M.D. Forty-two members were present. Upon motion duly made and carried, the minutes of the previous meeting were approved as written.

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Following the report of the committee, the President urged all members and especially the delegates and alternates to attend the Eighth District Councilor Meeting to be held at Mount Vernon Sanatorium, Mount Vernon, on February 16. The President stated that our Councilor, Dr. Walter Tillman, promises an important meeting dealing with medical legislation and it is imperative that the society be well represented at this meeting.

The meeting was then turned over to the program chairman, Dr. David O. Allen. Dr. Joe E. Collins introduced the speaker of the evening, Dr. J. W. Kelso, whose topic was, "Surgical Management of Cervical Cancer."

There being no further business to come before the meeting, same was, on motion duly made and carried, adjourned.

David Allen, M.D., *Secretary*

Ozarks Medical Society

A meeting of the Ozarks Medical Society and the doctors' wives was held at the American Legion Hall in Monett on Tuesday night, January 12. The evening festivities began with a social hour followed by dinner and then the program.

Dr. Tillman discussed Association matters with the group.

Informal discussion with the Councilor followed the meeting.

The scientific paper was presented by Richard J. Dames, M.D., Department of Internal Medicine, St. Louis University Medical School. His subject was, "Practical Electrocardiography." This was illustrated by numerous slides. A good number of questions from the audience added to the interest and value of the entire discussion.

At the business part of the session Dr. F. Alsup was elected to honorary membership. The district councilor, Dr. W. W. Tillman, discussed the coming Councilor District meeting on February 16 to be held at the State Sanatorium in Mount Vernon. He also discussed a project entitled, "The Hospital Story," which is being proposed to a number of schools over the State of Missouri by the Missouri Hospital Association.

In view of the Councilor District meeting on February 16, the Society voted to cancel their regular meeting scheduled for February 9, and to consider the 8th Councilor District meeting in its place, hoping that all members will attend. The next regular meeting of the Ozark Society will be Tuesday evening, March 8, in Mount Vernon.

Following Dr. Tillman's discussion, Mr. Ray McIntyre, Field Secretary of the State Association, discussed briefly the State Medical Association meeting at the Sheraton-Jefferson Hotel in St. Louis, March 13-16.

Thirty-five doctors, wives and guests were in attendance.

A. J. Graves, M.D., *Secretary*

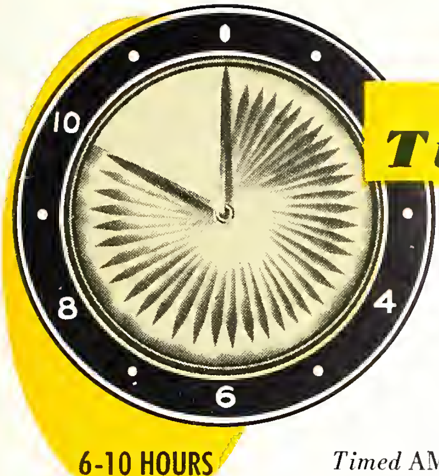
NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Mid-Missouri County Medical Society

A combined dinner meeting of the Mid-Missouri Medical Society and the Fort Leonard Wood Clinical Society and the doctors' wives was held at the Officers Open Mess at Fort Leonard Wood on Tuesday night, January 26.

Preceding dinner those present enjoyed a pleasant social hour. The scientific program, which began at 8:30 p.m., was given by Leslie R. Webb, Jr., M.D., internist of Springfield, consultant in gastroenterology to the hospital at the Fort. Dr. Webb spoke on "Approach to Massive Gastro-Intestinal Hemorrhage." His was an interesting and informative paper followed by a spirited discussion.



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Amobarbital	60 mg.

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Before the development of *Timed* AMO*dex* (Testagar) the usual dose of Dextro-amphetamine hydrochloride, for the control of appetite, was one 5 mg. tablet two or three times a day. The usual dose of Amobarbital ranged from 20 to 40 mg., two or three times a day. On such a dosage regimen the absorption of the drugs, after ingestion, takes place quite rapidly. The therapeutic activity occurs within one-half to one hour. When the therapeutic peak is reached, a gradual decline takes place. At this point, the patient should receive another dose of medication . . . the cycle is then repeated.

Patients frequently fail to follow the physician's instructions. They take medication at irregular intervals. When this occurs with drugs such as dextro-amphetamine sulfate, phosphate or hydrochloride, excitation may result. A balanced combination of Dextro-amphetamine hydrochloride, **the preferred salt,** plus a balanced daily dose of Amobarbital will give the expected therapeutic results *without* excitation.

Timed AMO*dex*, after ingestion, releases Dextro-amphetamine Hydrochloride and Amobarbital steadily and uniformly over a period of 6 to 10 hours. Therefore, the physician may dispense with the usual dosage schedule thereby *attaining better control of therapy*. The patient will receive the benefits of even and sustained therapeutic effects. Side reactions such as anxiety and excitation are greatly minimized.

ACTION AND USES

Timed AMO*dex* *CAPSULES* (Testagar) supply the antidepressant and mood-elevating effects of Dextro-amphetamine hydrochloride and the calming action of Amobarbital. *Timed* AMO*dex* elevates the mood, relieves nervous tension, restores emotional stability and the capacity for mental and physical effort.

INDICATIONS

Timed AMO*dex* is the preferred treatment in anxiety states and in the management of obesity. *Timed* AMO*dex* may also be used in the treatment of Depressive states, Alcoholism, Nausea and Vomiting of Pregnancy.

DOSAGE The Daily Dose of *Timed* AMO*dex* (Testagar) IS ONE CAPSULE ON ARISING OR AT BREAKFAST.

SUPPLIED Bottles of 100 and 1000 capsules, available at all pharmacies. Also supplied in half strength as *Timed* AMO*dex*, Jr.

AMO*dex* ADVANTAGES

- HIGH-LEVEL ANOREXIGENIC ACTIVITY WITHOUT NERVOUS EXCITATION
- SMOOTH, UNIFORM ACTION
- THERAPEUTIC EFFECT LASTING 6 TO 10 HOURS
- ONLY ONE DOSE DAILY
- CLINICALLY ECONOMICAL TO THE PATIENT

Timed AMO*dex* *CAPSULES* are manufactured under these patent numbers:
2,736,682 – 2,809,916
2,809,917 – 2,809,918
Which provide prolonged, continuous therapeutic effect over a period of 6-10 hours

SAMPLES AND LITERATURE UPON REQUEST

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Col. Eaker, Chief of Surgery, and Col. Roberts, Chief of Medicine, at Fort Leonard Wood, led the discusison. A strong representation of the members of the Mid-Missouri Society attended this fine meeting.

As usual, the Councilor, Dr. J. H. Summers, and Mrs. Summers were present to take part in the society's activities. The Mid-Missouri Society is pleased with the fine relationship that it has with the Fort Leonard Wood Clinical Society and this co-operative situation is a definite help to both groups.

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler, Ripley, Wayne County Medical Society

The Butler, Ripley, Wayne County Medical Society held its monthly meeting December 29, 1959, at the Northwold Restaurant, Poplar Bluff. There were ten members present, this being the regular officer election night and the poorest turnout this year.

The County Society elected to make an annual contribution ot the Southeastern Missouri Science Fair at Cape Girardeau which the Society as a whole felt a worthwhile project.

There was discussion of the Forand Bill and the possibility that we should become much more active in local campaigning against passage of this bill. The matter of a local tuberculosis committee was brought up. This was turned over to Dr. Edward Cline for further study. It is felt that some type coordination on the local level would be important between the practitioners and the state level.

The following officers were elected for the year 1960: President, B. M. McLain, M.D., Poplar Bluff; Vice President, F. L. Kneibert, Poplar Bluff; Secretary-Treasurer, E. T. Hansbrough, Poplar Bluff. Delegates to the Missouri Medical meeting: Fred J. Biggs, Poplar Bluff, was reelected from Butler County; alternate, Dr. Cyril Post. Dr. Harold Cline and Dr. Frank Johnson were elected from Wayne and Ripley respectively. D. V. Miller, M.D., was nominated for a three year term on the local board of censors.

E. T. Hansbrough, M.D.,
Secretary-Treasurer

Mineral Area County Medical Society

Michael Pernoud, M.D., opthalmologist of St. Louis, spoke before a meeting of the Mineral Area County Medical Society at the State Hospital in Farmington on Thursday night, January 21. His subject was "Eye Trauma." Dr. Pernoud gave a most interesting and informative discussion of the problems involved in eye trauma.

There was considerable discussion by all present which was definite evidence of the interest manifested in this presentation. A fine turn-out of the physicians in the Society added to the real value of this first meeting of the Society in the new year.

George L. Watkins, M.D., *Secretary*

DEATHS

Morroway, James H., M.D., St. Joseph, a graduate of John A. Creighton Medical College, 1900; member of Buchanan County Medical Society; aged 80; died December 12.

Sims, John L., M.D., Joplin, a graduate of St. Louis University School of Medicine, 1909; member of Jasper County Medical Society; aged 76; died December 23.

Whitsell, John C., M.D., St. Joseph, a graduate of Ensworth Medical College, 1903; a member of Buchanan County Medical Society; aged 84; died December 27.

Hamilton, Hugh G., M.D., Kansas City, a graduate of University of Pennsylvania Medical School, 1931; member of Jackson County Medical Society; aged 54; died January 4.

Mott, James R., M.D., a graduate of Barnes Medical College, 1907; member of South Central Counties Medical Society; aged 82; died January 16.

Snavely, Edmund C., M.D., Sedalia, graduate of Barnes Medical College, 1905; member of Pettis County Medical Society; aged 83; died January 27.

CITY HOSPITAL ALUMNI TO MEET

The St. Louis City Hospital Alumni Association will hold its annual banquet on Wednesday, March 16, at LeChateau, at 6:30 p.m. Members attending the Annual Session of the Missouri State Medical Association are invited to remain for the banquet. An outstanding sports speaker will be the speaker and Herbert C. Sweet, M.D., St. Louis, will preside.

Reservations may be made at the Registration desk during the Annual Session.

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1. Projection from Vital Statistics, U.S. Government Dept. HEW, Vol. 48, No. 14, 1958, p. 398.
2. Modell, W.: Drugs of Choice 1958-1959, St. Louis, C. V. Mosby Company, 1958, p. 347.

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MISSOURI STATE MEDICAL ASSOCIATION

102nd Annual Session

Sheraton-Jefferson Hotel, St. Louis

March 13, 14, 15, 16, 1960

TIME AND PLACE OF MEETINGS

Sunday, March 13

12:30 p.m. Registration for House of Delegates, Mezzanine Floor.

1:30 p.m. House of Delegates, Crystal Room.

3:30 p.m. Reference Committee Meetings, Crystal Room, Rooms 2, 3, 4, 6, and 8.

6:30 p.m. Buffet Supper and Entertainment, Woman's Auxiliary, Boulevard Room.

Monday, March 14

8:00 a.m. Registration, Mezzanine Floor.

9:00 a.m. Refresher Courses, Crystal Room, Rooms 2, 3, 7 and 8.

10:00 a.m. Intermission to View Exhibits, Mezzanine Floor.

10:30 a.m. Scientific Session, Crystal Room.

12:00 noon Committee on Maternal Welfare Luncheon. Room 9.

2:00 p.m. Scientific Session, Crystal Room.

3:00 p.m. Intermission to View Exhibits, Mezzanine Floor.

3:30 p.m. Panel: Medical Insurance, Crystal Room.

4:30 p.m. House of Delegates, Crystal Room.

5:15 p.m. Reference Committee Meetings, Crystal Room, Rooms 2, 3, 6 and 7.

6:00 p.m. Dinner Meeting, St. Louis and Kansas City Gynecological Societies, Mayfair Hotel.

6:30 p.m. Dinner Meeting, Committee on Diabetes and Missouri Diabetes Association, Room 4.

6:30 p.m. Dinner Meeting, Missouri State Surgical Society, Missouri Athletic Club.

Tuesday, March 15

8:00 a.m. Registration, Mezzanine Floor.

9:30 a.m. Scientific Session, Crystal Room.

10:30 a.m. Intermission to View Exhibits, Mezzanine Floor.

11:00 a.m. Scientific Session, Crystal Room.

12:00 noon University of Missouri Medical Alumni, Luncheon, Gold Room.

2:00 p.m. Scientific Session, Crystal Room.

3:00 p.m. Intermission to View Exhibits.

3:30 p.m. Clinical Pathologic Conference, Crystal Room.

7:30 p.m. Annual Banquet in Honor of Past Presidents.

Wednesday, **March 16**

9:00 a.m. Scientific Sessions, Crystal Room and Room 3.

10:30 a.m. Intermission to View Exhibits, Mezzanine Floor.

11:00 a.m. Scientific Session, Crystal Room.

1:30 p.m. House of Delegates, Crystal Room.

REFRESHER COURSES

Monday, March 14, 1960, Sheraton-Jefferson Hotel

9:00 a.m. Refresher Courses:

Fluid Balance, C. Thorpe Ray, M.D., Columbia. Room 2.

Common Dermatological Problems, Richard L. Sutton, M.D., Kansas City. Room 3.

Rheumatoid Arthritis, Paul Hagemann, M.D., St. Louis. Room 7.

A brief presentation regarding diagnostic criteria separating this entity from other collagen diseases will be given. Newer related laboratory tests will be discussed giving them their proper emphasis and interpretation. Finally, the high lights of current therapy will be presented, just how much steroid should be used, when to use antimalarial drugs, and such questions will be answered.

Management of Common Obstetric Problems, J. S. Roden, M.D., Columbia. Crystal Room.

Rectal Bleeding, Francis J. Burns, M.D., St. Louis. Room 8.

Bleeding from the rectum is a rather common sign and, in every case, should be investigated. A precise clinical history is important and a thorough examination of the anal canal, rectum and colon should be made. The common causes of bleeding will be mentioned as well as their methods of diagnosis.

10:00 a.m. Intermission to View Exhibits.

GENERAL MEETING

Monday, March 14, 1960, Crystal Room, Sheraton-Jefferson Hotel

RALPH PERRY, M.D., Kansas City, Presiding

10:30 a.m. Newer Concepts in Therapy of Diabetes, Franklin B. Peck, M.D., Indianapolis, Ind.

It is now being established that other systems besides carbohydrate are involved in the clinical syndrome diabetes, particularly protein synthesis and lipid metabolism. Modern therapy has been based on compensating the diabetic imbalance brought about by extra demands on the insulogenic mechanism by means of Insulin artificially introduced into the system or reducing the stress load by dietary restriction. The recent introduction of oral hypoglycemic agents has introduced special problems which are not yet resolved. The diet is every bit at important a part of treatment as the prescription of Insulin or oral tablets but this keystone of therapy is being sadly neglected.

Today most clinicians aim as closely as possible toward the establishment of normal blood chemistry and freedom from glycosuria, but accept partial fulfillment of these objectives. Such a compromise usually permits glycosuria in one period after a meal, a blood sugar higher than normal on one post-prandial period, normal cholesterol values, absence of urinary ketones and normal activity, weight and growth without hypoglycemic reactions.

The place of oral agents in therapy will be considered along with a discussion of the clinical principles involved in the use of the several varieties of modified Insulin preparations in relation to their differences in time action.

Sponsored by the Missouri Diabetes Association.

11:15 a.m. The Early Diagnosis and Treatment of Fat Embolism, Garrett F. Pipkin, M.D., Kansas City.

In 1936 Koritschorner and Sophian published in the *Journal of the Missouri Medical Association* their falling hemoglobin test for the early diagnosis of fat embolism enabling physicians to diagnose the syndrome before the antimortem stage, and at a time soon enough to provide life saving treatment. Most unfortunately this test has never reached the major textbooks on trauma, and has remained buried—save for word of mouth survival by a few disciples in Kansas City. Time and further research have not only substantiated their observations, but have added to the armamentarium of their suggestions for treatment.

Fat embolism is a morbid process, some phases of which should be assumed to be present after all moderate and severe injuries, and after bone operations. In most cases nature provides a margin of safety of from forty-eight to seventy-two hours until critical symptoms develop. It is in this period that much can be done. An otherwise unexplained rapid fall in hemoglobin value should be assumed to be due to fat embolism. The physician is then faced with a treatment race against time, since the condition is usually fatal before the sixth day or else reverses itself.

In reporting the results of any method of treatment of fat embolism the probability of spontaneous recovery arises in any single case. All that one can say is that some of our cases which should have died—survived. Since instituting the diagnostic and therapeutic methods presented in this paper in 1954, no case of fat embolism has been posted on our service.

11:30 a.m. Nervousness and Pheochromocytoma, Warren F. Wilhelm, M.D., Kansas City.

A brief review of the literature and background of clinical and laboratory tests for detection of pheochromocytoma with presentation of case history of a patient with five to six year history of repeated attacks of "nervousness" with studies indicating pheochromocytoma will be presented. The patient was examined and tumor removed with complete relief of symptoms and previously noted paroxymal attacks.

11:45 a.m. Hyaline Membrane Disease, Prophylaxis and Treatment, Daniel B. Landau, M.D., Hannibal.

Some of the theories regarding the pathogenesis and some case reports which illustrate this theory and the method used in treatment will be presented.

Guides for treatment include: maternal history during pregnancy; birth history; course that infant runs during the first few hours and the first few days when indicated, including physical findings; venous pressures; blood counts; x-rays.

12:00 noon Committee on Maternal Welfare Luncheon Meeting. Room 9.

COMMITTEE ON MATERNAL WELFARE

LUNCHEON MEETING

Monday, March 14, 1960, 12:00 noon, Room 9, Sheraton-Jefferson Hotel

JAMES E. KEELER, M.D., Kansas City, Presiding

Discussion of Cases of Maternal Deaths Involving Toxemia.

Michael Newton, M.D., Jackson, Miss., Guest.

Report of the Committee on Maternal Welfare.

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1. A.M.A. Council on Drugs: New and Nonofficial Drugs 1959, Philadelphia, Lippincott, 1959, p. 389. 2. United States Dispensatory (Osol-Farrar), ed. 25, Philadelphia, Lippincott, 1955, p. 1412. 3. Grollman, A.: Pharmacology and Therapeutics, ed. 3, Philadelphia, Lea & Febiger, 1958, p. 208.

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GENERAL MEETING

Monday, March 14, 1960, Crystal Room, Sheraton-Jefferson Hotel

JAMES R. MEADOR, M.D., Clayton, Presiding

2:00 p.m. Surgery of the Common Bile Duct, George A. Hallenbeck, M.D., Rochester, Minn.
Sponsored by the Missouri Surgical Society.

2:30 p.m. Estimation and Measurement of Blood Loss at Delivery, Michael Newton, M.D., Jackson, Miss.
Sponsored by the St. Louis Gynecological Society.

3:00 p.m. Intermission to View Exhibits.

3:30 p.m. Panel: Medical Insurance, To Whom Does the Fee Belong?
Moderator: A. P. Rowlette, M.D., Moberly.
Panelists:
L. V. Mulligan, M.D., St. Louis.
Carl Moyer, M.D., St. Louis.
R. O. Muether, M.D., St. Louis
A. E. Spelman, M.D., Smithville.

4:30 p.m. House of Delegates. Crystal Room.
Reference Committee Meetings. Rooms 2, 3, 6, 7.

6:30 p.m. Committee on Diabetes and Missouri Diabetes Association dinner meeting, Room 4.

6:00 p.m. St. Louis and Kansas City Gynecological Societies dinner meeting, Mayfair Hotel.

6:30 p.m. Missouri State Surgical Society dinner meeting, Missouri Athletic Club.

COMMITTEE ON DIABETES AND MISSOURI DIABETES ASSOCIATION

DINNER MEETING

Monday, March 14, 1960, 6:30 p.m., Room 4, Sheraton-Jefferson Hotel

H. E. OPPENHEIMER, M.D., St. Louis, Presiding

Trends in Therapy, Franklin B. Peck, M.D., Indianapolis, Indiana.

ST. LOUIS AND KANSAS CITY GYNECOLOGICAL SOCIETIES

DINNER MEETING

Monday, March 14, 6:00 p.m., Mayfair Hotel

ROY V. BOEDEKER, M.D., St. Louis, Presiding

Carcinoma of the Cervix, Michael Newton, M.D., Jackson, Miss.

MISSOURI STATE SURGICAL SOCIETY

DINNER MEETING

Monday, March 14, 1960, 6:30 p.m., Missouri Athletic Club

J. W. THOMPSON, M.D., St. Louis, Presiding

George A. Hallenbeck, M.D., Rochester, Minn., Speaker.

GENERAL MEETING

Tuesday, March 15, 1960, Crystal **Room, Sheraton-Jefferson Hotel**

G. D. SHULL, M.D., Jefferson City, Presiding

9:30 a.m. Panel: Peripheral Vascular Disease.
Moderator: Ormand C. Julian, M.D., Chicago.
Panelists:
Nelson W. Barker, M.D., Rochester, Minn.
Theodore E. Keats, M.D., Columbia.
C. Rollins Hanlon, M.D., St. Louis.

10:30 a.m. Intermission to View Exhibits.

11:00 a.m. Pulmonary Emphysema, Hurley L. Motley, M.D., Los Angeles, Calif.

Pulmonary emphysema is the most common chronic lung disease encountered today and the incidence appears to be increasing. Factors related to etiology will be discussed inasfar as known. Although more common in men, emphysema is now being recognized with increasing frequency in women.

The early diagnosis of emphysema by the usual clinical means is often difficult and frequently missed. Even in severe emphysema, the chest roentgenogram may be misleading in some cases, and the reverse situation occurs. Pulmonary function tests are well suited to evaluate the extent and severity of emphysema in the individual case. No single test of function has been found satisfactory, rather a battery of physiologic tests are required for accurate diagnosis and evaluation in the individual patient. Function tests are helpful for surgical or medical management or assessing disability status. The emphysema patient has difficulty in getting air down to the alveolar level adequately, there is impairment in the transfer of oxygen and carbon dioxide between the alveoli and the blood and the pulmonary circulation lacks expansibility. Unrecognized respiratory acidosis is a frequent cause of death in severe emphysema, precipitated often by the administration of one of the opiate or barbiturate group of drugs and/or oxygen, and there are no postmortem findings to make the diagnosis. Newer forms of treatment in the management of emphysema will be discussed.

Question Period. Moderator: Paul Murphy, M.D., St. Louis.

12:00 noon University of Missouri Medical Alumni Luncheon. Gold Room.

UNIVERSITY OF MISSOURI MEDICAL ALUMNI ASSOCIATION

LUNCHEON MEETING

Tuesday, March 15, 1960, 12:00 noon, Gold Room, Sheraton-Jefferson Hotel

JOHN W. McHANEY, M.D., Jefferson City, Presiding

Presentation of the Fifth Citation of Merit of the University of Missouri to a Medical Alumnus, Hurley L. Motley, M.D., Los Angeles, recipient.

Vernon E. Wilson, M.D., Columbia, Dean, University of Missouri School of Medicine, Speaker.

GENERAL MEETNG

Tuesday, March 15, 1960, Crystal Room, Sheraton-Jefferson Hotel

J. J. WIMP, M.D., Kirksville, Presiding

2:00 p.m. Indications for Open Heart Surgery in Adults, Ormand C. Julian, M.D., Chicago.

Open heart surgery for congenital cardiac abnormalities in adults presents a number of problems which differ considerably from those met in the same kind of surgery in children. Almost all of the congenital lesions seen in childhood may be presented by an adult patient. The degree of the deformities is usually less severe, having permitted the patient to survive for several decades. The stimulus to consider surgery is often based on symptoms which develop at this later time because of the onset of degenerative changes in the myocardium, or upon the manifestation of anatomic changes in the pulmonary arterial system, secondary to the intra-cardiac abnormality. The decision as to whether repair should be undertaken or not must be made on a highly individual basis, strongly influencing the generalizations which may be made regarding each category of abnormality.

The applications of open methods of repair to acquired cardiac lesions is a problem almost entirely confined to adult surgery. By far the greater portion of such lesions are the valvular deformities of rheumatic fever. Certain clear indications for substituting open heart surgery for closed methods are developing in the surgery for mitral stenosis. Clear indications include the presence of a significant degree of mitral regurgitation, the presence of thrombosis in the left atrium, and, in most cases, recurrence of mitral stenosis after a previous closed commissurotomy.

Distinct clinical mitral regurgitation is a clear cut indication for open heart surgery if surgical repair must be done. The decision to operate in these instances is most definitely influenced by the greated danger as compared to surgery for a stenosed valve, and also by the expectation that improvement in surgical treatment of mitral regurgitation can be expected with the development of an artificial valve for replacement. Similar considerations are important in the selection of patients with aortic valve deformity for surgery.

Fundamentally, the indication for surgery involving cardiopulmonary by-pass depends upon the prognosis as to comfort and longevity of the patient without surgery, the risk of the required procedure and the character of the result which may be anticipated if surgery is successfully done.

2:30 p.m. Management of Children With Diabetes Mellitus, Robert L. Jackson, M.D., Columbia.

Diabetes in children during the pre-insulin era was a severe and rapidly progressive disease. Advances in the field of nutrition, introduction of prolonged-acting insulin preparations, and the discovery of antibacterial agents with which to combat intercurrent infections are all important factors which have combined to make it possible to attain and maintain control of the disease.

The juvenile type of diabetes is so different from diabetes in the middle aged or elderly patient that it requires special consideration. Present knowledge makes is possible to attain a high degree of control if the diabetic child is given adequate treatment early. It also is practicable to maintain good control for the child if he lives in a well adjusted home. It is important that the parents and child be carefully instructed and encouraged to become self-reliant. Until more knowledge of the disease is available, good control offers the best means of delaying or of averting degenerative changes.

An optimistic rather than a pessimistic outlook is warranted. There is reason to hope that soon practical methods to detect pre-diabetic patients may be had, and means to prevent the development of overt forms of the disease. Studies of this nature are in progress at the University of Missouri Medical Center. There also is reason to hope that more specific means of preventing vascular degeneration may be found.

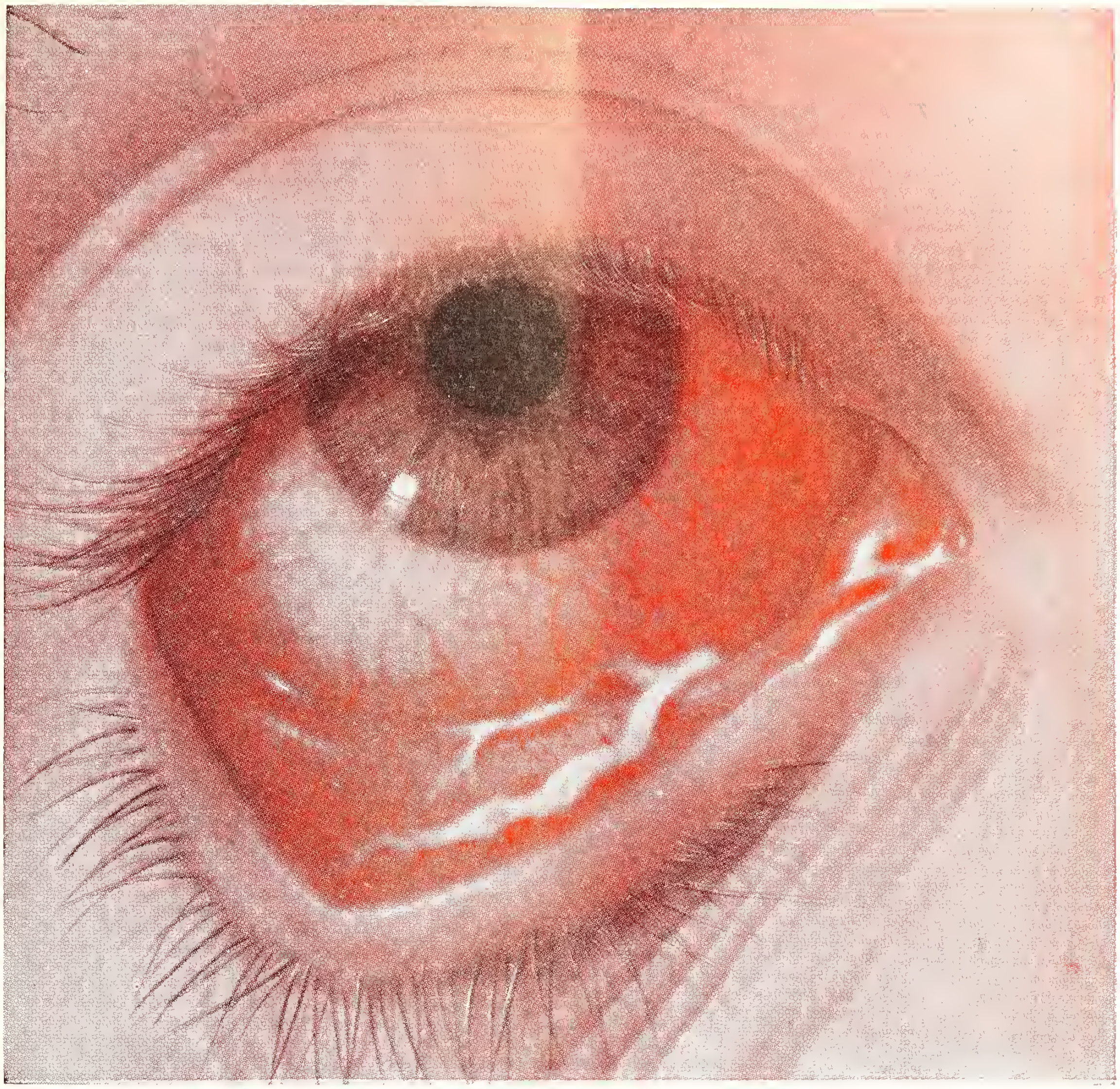
The use of oral hypoglycemic drugs will be discussed briefly.

2:45 p.m. Recent Advances in Arthritis, Jack Zuckner, M.D., St. Louis.

Several new steroids have been introduced in the last few years for systemic and local therapy in various rheumatic diseases. Dexamethasone, the latest of the anti-inflammatory steroids recommended for treatment of rheumatoid arthritis, has been under intensive study at St. Louis University School of Medicine and results of long term oral therapy in 54 patients will be described. Similar studies with triamcinolone administered to 50 patients with rheumatoid arthritis will also be reported. In general, these newer hormones offered no significant advantages over some of the older preparations. There has also been no apparent superiority of any of the several derivatives of hydrocortisone, prednisolone and related compounds recently made available for intraarticular administration.

The various agglutination tests used as diagnostic aids will also be briefly discussed.

3:00 p.m. Intermission to View Exhibits.



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1. Lippmann, O.: Arch. Ophth. **57**:339, March 1957
2. Gordon, D.M.: Am. J. Ophth. **46**:740, November 1958.

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CLINICAL PATHOLOGIC CONFERENCE

Tuesday, March 15, 1960, 3:30 p.m., Crystal Room, Sheraton-Jefferson Hotel

Moderator: Carl V. Moore, M.D., St. Louis.
Case Presentation: Hollis N. Allen, M.D., St. Louis.
Discussants:
Don C. Weir, M.D., St. Louis.
Hugh E. Stephenson, Jr., M.D., Columbia.
Maxwell G. Berry, M.D., Kansas City.

Case Presentation

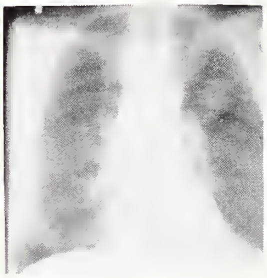
This 64 year old male was seen about August 25, 1957, by a physician because of a blocked nose. He had a heavy crust in the left side of his nose. Treatment was unsatisfactory and he was referred to an ear, nose and throat specialist.

Ear, Nose and Throat Examination.—There was a complete upper and lower denture. The pharynx was normal. The nasal septum was deflected to the right anterior. The right side of the nose was clear. On the left side of the nose, there was an infiltration of the upper lateral cartilage and ulceration of the septum. Wiping the area produced bleeding. There were a few small palpable glands in the neck—more on the right side than on the left.

He was scheduled to enter the hospital on Nov. 11, 1957, for a biopsy. Under local anesthesia, tissue was removed from the septum and ala. Clinical diagnosis was carcinoma. Although adequate local anesthesia was used, the patient complained of pain throughout the entire procedure.

Laboratory Data.—On Nov. 11, 1957, hematocrit was 35; red blood count was 4,100,000; white blood count was 9,300; nonprotein nitrogen was 36 mgs. per cent. Urine had a specific gravity of 1.016, was acid, had a few white blood cells, occasional red blood cell and occasional cast. VDRL was reactive. Sputum was negative for acid-fast bacilli.

Chest X-ray.—There was consolidation in the upper part of the left lung extending up and slightly back of the hilum with questionable cavitation in the center, suggesting inflammatory process or possibly neoplasm.

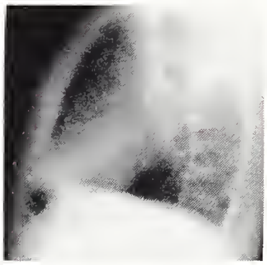

X-ray taken on Nov. 12, 1957.

Tissue Examination.—A. Ala biopsy. B. Septum biopsy.

Gross Pathology.—Specimen A., a biopsy from the ala, consists of two small pieces of tissue, the largest measuring 4 by 3 by 2 mm. Specimen B consists of one large piece 12 by 5 by 3 mm. and several smaller pieces of tissue, said to be biopsy from the septum.

Microscopic Examination.—A. The smaller piece of tissue consists of inflammatory granulation tissue containing moderate numbers of multinucleated giant cells and partly covered by stratified squamous epithelium. The largest piece of tissue consists of skin which is partly ulcerated and the floor of the ulcer is formed by a thick layer of chronic inflammatory granulation tissue.

B. The tissue consists of florid granulation tissue consisting of a network of small blood vessels and closely packed plasma cell, histiocytes, lymphocytes, eosinophils and neutrophils. There is moderate swelling and proliferation of the endothelium lining the small vessels. In some areas there are large numbers of multinucleated histiocytic giant cells. The tissue is partly covered with stratified squamous epithelium. There are areas of pseudo-epitheliomatous hyperplasia, but no evidence of squamous cell carcinoma. Foreign body was searched for but not demonstrated.


X-ray taken on Dec. 19, 1957.

Diagnosis.—Granuloma, etiology undetermined.

Comment.—The VDRL was positive and Wasserman pending. A therapeutic trial of penicillin (full course of penicillin) was recommended, regardless of the results of the Wasserman test. If antibiotic therapy should fail, then surgical removal of all the lesions was recommended (if feasible). Foreign body had not been ruled out. If the lesion should progress inexorably in spite of all treatment, than idiopathic ("lethal") midline facial granuloma would have to be considered.

SEMINAR: ACCIDENTS IN CHILDREN

Wednesday, March 16, 9:00 a.m., Room 9, Sheraton-Jefferson Hotel

NEAL MIDDELKAMP, M.D., Moderator

Burns, Frank S. McDowell, M.D., St. Louis.

A short discussion will be given of the causes and treatment of burns in children. Different types of treatment will be considered with some discussion of the advantages and disadvantages of each.

Head Injuries, Frank A. Palazzo, M.D., St. Louis.

Points of practical importance in the care of infants and children with head injuries are presented.

Special emphasis is placed on the immediate measures necessary and those which apply during the danger period of a few hours or days following the injury.

Precautions against some frequent pitfalls in evaluating the severity and exact nature of the head injury sustained are described. Birth injuries, subdural and extradural hematomata are also considered.

Poisonings, A. Roger Sharp, M.D., St. Louis.

Emphasis will be placed on poisonings occurring in and around the home, particularly as they are seen in children. In recent years intoxication caused by many of the newer widely used drugs has become a problem in children. Because of the bizarre clinical picture with which these patients present, an attempt will be made to cover briefly this latter problem as well.

Fractures, Warren Stamp, M.D., St. Louis.

The management of children's fractures is a great deal different from that of the adult, because of their innate ability to heal and to correct residual deformities following reduction. Angular deformities may be well compensated for by growth, while rotational deformities are not automatically corrected by the child. This discussion is not a plea to neglect or disregard children's fractures, but merely to recognize certain limitations in their management. Open reduction is rarely indicated in closed, uncomplicated children's fractures. Conservative treatment, such as Bryant's traction, as used in femoral fractures, may have disastrous sequelae. Illustrative cases will be shown to demonstrate the critical points in the management of children's fractures.

SYMPOSIUM: MODERN CONCEPTS OF TREATMENT OF ARTERIOSCLEROTIC HEART DISEASE

Wednesday, March 16, 9:00 a.m., Crystal Room, Sheraton-Jefferson Hotel

ROLAND P. LADENSON, M.D., Columbia, Moderator

Anticoagulant Therapy, Benjamin Manchester, M.D., Washington, D.C.

The advantages and limitations of anticoagulants for the prevention and treatment of thromboembolism will reflect 16 years' experience with such therapy. The value of anticoagulants in chronic heart failure, acute myocardial infarction, the prevention of subsequent myocardial infarction, angina pectoris without previous myocardial infarction will be related to large groups of patients and compared with an equal number of controls. The contraindications for such treatment and the management of hemorrhagic complications, as well as their significance, will be represented by illustrative cases.

A simple accurate bedside blood prothrombin time employed during the last 16 years in the management of anticoagulant therapy will be demonstrated. The ease of performance, simplicity, reproducibility has made long-term anticoagulation feasible and practical.

The Value of Laboratory Tests in Predicting Atherosclerosis, Laurance W. Kinsell, M.D., Oakland, Calif.

The question of the reliability of laboratory measurements as diagnostic or prognostic agents in individuals known or suspected of having atherosclerosis is still a highly controversial issue. The experience of the members of the Institute for Metabolic Research is as follows:

1. The measurement of total cholesterol plus total lipids gives more information than the measurement of total cholesterol alone. It gives at least as much information as the "atherogenic index," at a much lesser cost.
2. In individuals under 45, the level of blood lipids has a high correlation with atherosclerosis. Elevated lipids are defined as cholesterol values above 180, and total lipid values above 650 mg. per 100 ml. of plasma. Individuals in this age group with values well in excess of these figures should probably be placed on a dietary program designed to normalize lipids.
3. Blood lipid measurements in individuals past 60 are much less reliable as indices of atherosclerosis, to such a degree that one may wonder whether one is dealing with a different disease.
4. There is considerable over-lapping in individuals between 45 and 60.
5. Other laboratory findings which are still in an investigative phase will be considered.

Dietary Therapy, Lester M. Morrison, M.D., Los Angeles.

Therapy Influencing the Absorption and Metabolism of Cholesterol, George L. Curran, M.D., St. Louis.

The cholesterol content of the body can be lowered in three ways:

1. Destruction of cholesterol within the body can be increased.
2. Reabsorption of biliary cholesterol from the intestine can be decreased.
3. Endogenous cholesterol synthesis can be decreased.

Dietary and chemical approaches to these three forms of therapy will be evaluated.

Sponsored by the Missouri Heart Association.

10:30 a.m. Intermission to View Exhibits.

GENERAL MEETING

Wednesday, March 16, 11:00 a.m., Crystal Room, Sheraton-Jefferson Hotel

DANIEL L. SEXTON, M.D., St. Louis, Presiding

Some Clinical Studies on the Use of Propionyl Erythromycin, Wallace E. Herrell, M.D., Lexington, Ky.

Sponsored by the Missouri Society of Internal Medicine.

11:40 a.m. Annual Meeting, Missouri Society of Internal Medicine, Crystal Room.

SCIENTIFIC EXHIBITS

Studies of Ureteral Pressures by Means of the Strain Gauge, William F. Melick, M.D.; Joseph J. Naryka, M.D.; D. Gibas, M.D., and D. Karellos, M.D., St. Louis.

A Practical Approach to the Treatment of Mental and Emotional Disorders, G. Wilse Robinson, M.D., and Albert E. Fulton, M.D., Kansas City.

Recent Advances in the Radiation Treatment of Carcinoma of the Cervix and Corpus Uteri, Edwin C. Ernst, M.D.; Edwin C. Ernst, Jr., M.D.; Roland P. Ernst, M.D., and Richard E. Ernst, M.D., St. Louis.

Diagnosis and Treatment of Congenital Heart Disease, Including Cineangiographic Films and Model of Pump-Oxygenator, V. L. Willman, M.D.; J. G. Mudd, M.D., and C. R. Hanlon, M.D., St. Louis.

Hirschsprung's Disease in the Newborn Infant, J. Eugene Lewis, M.D., and Armand Brodeur, M.D., St. Louis.

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Carter-Shannon		
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Cooper	G. W. Winn, Boonville	
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Dallas-Hickory-Polk		
Dallas-Hickory-Polk	C. H. Barnett, Bolivar	Doyle C. McCraw, Bolivar
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Franklin-Gasconade-Warren	John F. Pearl, St. Clair	Frank G. Mays, Washington
Franklin-Gasconade-Warren	George Workman, Hermann	Paul A. Brenner, Owensville
Franklin-Gasconade-Warren	H. H. Schmidt, Marthasville	H. W. Eyerman, Warrenton
Grand River		
Caldwell	Howard Carter, Hamilton	Frank R. Daley, Hamilton
Livingston	Joseph Conrad, Chillicothe	W. L. Fair, Chillicothe
Carroll	John H. Platz, Carrollton	E. W. Allen, Carrollton
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Greene	J. P. Ferguson, Springfield	Don F. Gose, Springfield
Greene	Kenneth E. Knabb, Springfield	F. T. H'Doubler, Jr., Springfield
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Howard	M. P. Leech, Fayette	W. S. Shaw, Sr., Fayette
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Jackson	J. F. Bowser, Kansas City	W. R. Eubank, Kansas City
Jackson	P. L. Byers, Kansas City	W. W. Greene, Kansas City
Jackson	D. M. Eubank, Raytown	F. C. Hartwig, Kansas City
Jackson	R. W. Forsythe, Kansas City	C. L. Henry, Kansas City
Jackson	H. L. Gainey, Kansas City	W. H. Hickerson, Independence
Jackson	William W. Gist, Kansas City	Gerald Hughes, Kansas City
Jackson	J. A. Growdon, Kansas City	J. E. Keeler, Kansas City
Jackson	James Jarvis, Kansas City	E. H. Klein, Kansas City
Jackson	W. M. Kitchen, Kansas City	M. D. McFarland, Kansas City
Jackson	F. J. McCoy, Kansas City	P. W. Meyer, Kansas City
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Jackson	G. L. Miller, Kansas City	R. K. Skillman, Kansas City
Jackson	W. C. Mixson, Kansas City	R. W. Stockton, Kansas City
Jackson	J. C. Williams, Jr., Kansas City	W. F. Wilhelm, Kansas City
Jackson		
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Jasper	W. T. McNew, Carthage	M. F. Whitten, Carthage
Jefferson	Frank L. Kozal, Crystal City	C. E. Fallet, DeSoto
Johnson	Charles M. Lederer, Warrensburg	T. Reed Maxson, Warrensburg
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Lafayette-Ray		
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Lewis-Clark-Scotland		
Lewis-Clark-Scotland		
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Lincoln-St. Charles	P. H. Rother, St. Charles	W. H. Poggemeier, St. Charles
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Marion-Rolls-Shelby		
Marion-Rolls-Shelby	Charles Lichty, Shelbina	P. C. Archer, Shelbyville
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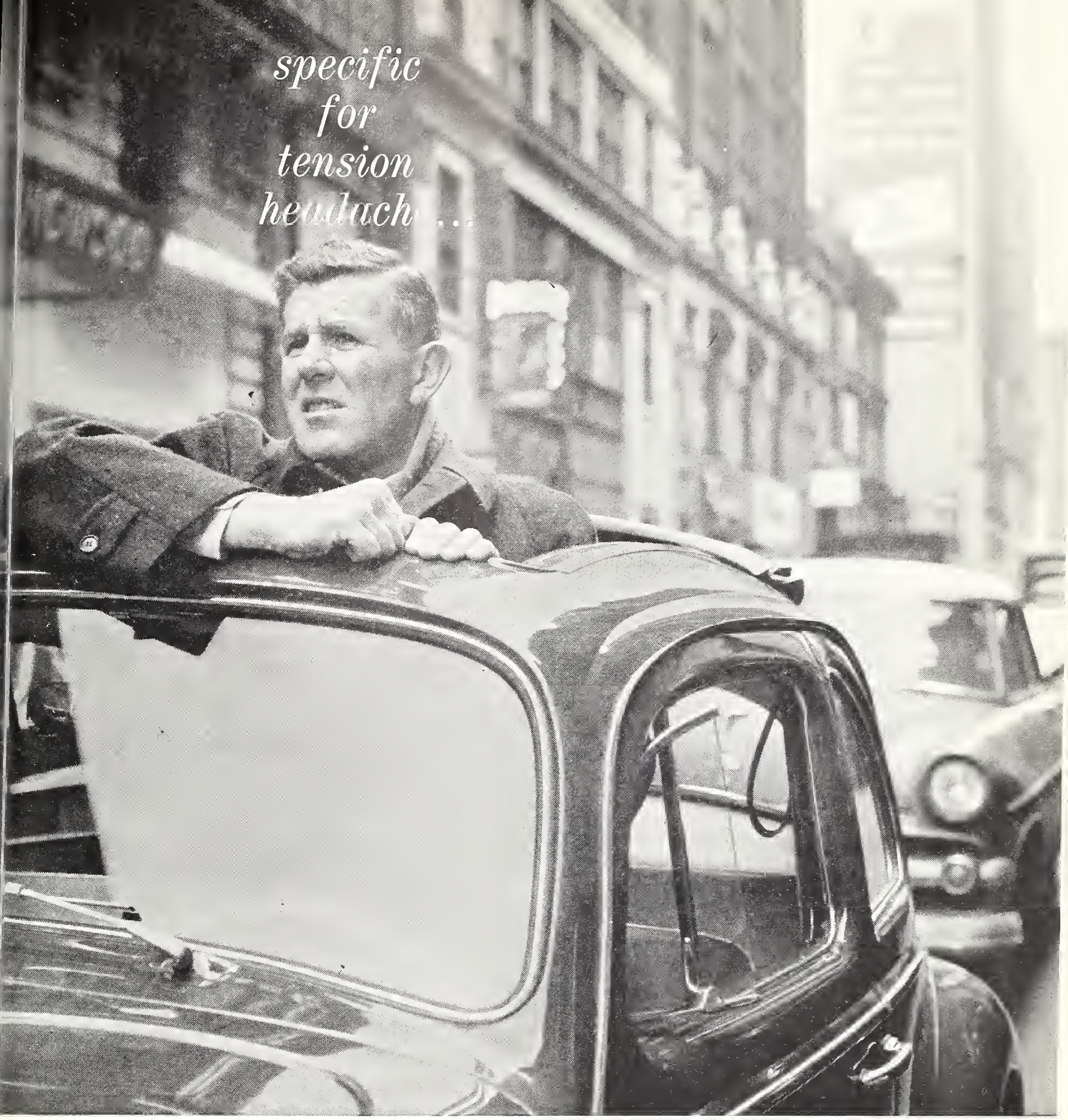
Crawford	Frank A. Elders, Jr., Cuba	G. W. Riffel, Bourbon
Dent	B. J. Bass, Salem	Alice S. Crosby, Salem
Pulaski	Clyde S. Miller, Waynesville	None
Maries	None	
Laclede	H. W. Carrington, Lebanon	James L. Hope, Lebanon
Miller		
Mineral Area		
St. Francois	H. M. Roebber, Bonne Terre	A. G. Karraker, Farmington
Iron	Marvin C. Menne, Ironton	None
Madison	Marvin Grossman, Fredericktown	C. A. Michaelis, Fredericktown
Washington	G. L. Cresswell, Potosi	None



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Montgomery	E. J. T. Anderson, Montgomery City	S. J. Byland, Wellsville
Morgan	J. L. Washburn, Versailles	Jack Gunn, Versailles
Nodaway-Holt-Atchison-Gentry-Worth	E. D. Imes, Maryville	H. C. Bauman, Maryville
Nodaway-Holt-Atchison-Gentry-Worth	I. F. Sweaney, Oregon	
Nodaway-Holt-Atchison-Gentry-Worth	Wallace Carpenter, Rock Port	E. B. Settle, Rock Port
Nodaway-Holt-Atchison-Gentry-Worth	A. L. Carlin, Stanberry	D. E. Blacklock, King City
Nodaway-Holt-Atchison-Gentry-Worth	Frank B. Matteson, Grant City	
North Central		
Adair	J. B. Jones, Kirksville	
Schuyler		
Knox		
Sullivan		
Putnam		
Ozarks		
Barry	W. J. Glass, Monett	R. R. Donley, Monett
Lawrence	Kenneth Glover, Mt. Vernon	A. J. C. McCallum, Aurora
Stone	Fred Wommack, Crane	A. P. Capetti, Crane
Christian	S. D. Roper, Ozark	
Taney	J. M. Threadgill, Forsythe	J. D. Bennett, Branson
Newton	M. C. Bowman, Neosho	G. W. Blankenship, Neosho
McDonald	J. J. Royce, Noel	
Pemiscot	Daniel R. Hensley, Wardell	O. W. Cook, Caruthersville
Perry	J. F. Fairchild, Perryville	A. C. McDermott, Perryville
Pettis	C. G. Stauffacher, Sedalia	K. B. Gonser, Sedalia
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St. Louis City	Don C. Weir, St. Louis	W. Baumgarten, Jr., St. Louis
St. Louis City	Charles S. Sherwin, St. Louis	J. W. Berry, St. Louis
St. Louis City	John P. Eberle, St. Louis	W. A. Bowersox, St. Louis
St. Louis City	Max S. Franklin, St. Louis	Ralph K. Earp, St. Louis
St. Louis City	G. L. Hawkins, Jr., St. Louis	J. C. Edwards, St. Louis
St. Louis City	Louis H. Kohler, St. Louis	Lee T. Ford, Jr., St. Louis
St. Louis City	J. Otto Lottes, St. Louis	Walter T. Gunn, St. Louis
St. Louis City	A. W. Neilson, St. Louis	E. G. Hamilton, St. Louis
St. Louis City	Dean Sauer, St. Louis	J. G. Janney, Jr., St. Louis
St. Louis City	J. B. Shapleigh, St. Louis	David N. Kerr, St. Louis
St. Louis City	G. E. Thoma, Jr., St. Louis	E. D. Kinsella, St. Louis
St. Louis City	H. C. Wiegand, St. Louis	W. F. Kistner, St. Louis
St. Louis City	H. C. Allen, St. Louis	M. J. Lonsway, Jr., St. Louis
St. Louis City	Robert B. Bassett, St. Louis	Thomas F. Maher, Jr., St. Louis
St. Louis City	Edward M. Cannon, St. Louis	W. F. Melick, St. Louis
St. Louis City	Peter G. Danis, St. Louis	Robert Mueller, St. Louis
St. Louis City	Charles R. Doyle, St. Louis	F. X. Paletta, St. Louis
St. Louis City	Michael M. Karl, St. Louis	J. C. Peden, Jr., St. Louis
St. Louis City	Joseph C. Peden, St. Louis	R. Potashnick, St. Louis
St. Louis City	Victor E. Scherman, St. Louis	H. K. Purcell, St. Louis

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Rautensin bibliography: 1. WRIGHT, W. T., JR.; POKORY, C., AND FOSTER, T.: AM. PRACT. & DIGEST. TREAT. 7:1992, 1956. 2. SUCKLE, E.: GERIATRICS 11:509, 1956. 3. FINCH, W. J.: J. OKLAHOMA M.A. 50:259, 1957. 4. TERMAN, L. A.: ILLINOIS M. J. 3:67, 1957. 5. GIFFORD, R. W.: J. ARKANSAS M. SOC. 55:31, 1958. 6. FORD, R. V., AND MOYER, J. H.: POSTGRAD. MED. 23:41, 1958.

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St. Louis City		
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St. Louis	Louis F. Howe, St. Louis	Paul W. Miles, St. Louis
St. Louis	Joseph B. Kendis, St. Louis	Charles Molden, St. Louis
St. Louis	James R. Meador, Clayton	James Sisk, Clayton
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Texas	J. L. Spears, Cabool	T. J. Burns, Houston
Wright	R. E. Denny, Mountain Grove	S. W. Connor, Mountain Grove
Douglas	Marvin Gentry, Ava	None
Ozark	Deborah Doane, Bakersfield	None
Webster	T. M. Macdonnell, Marshfield	C. R. Macdonnell, Marshfield
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Bates	Arthur L. Hansen, Butler	Carter Luter, Butler
Cass	David S. Long, Harrisonville	J. C. Moody, Harrisonville
Cedar	Robert Magee, Eldorado Springs	William Richter, Stockton
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l-Lysine HCl	300 mg.
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Pyridoxine HCl (B_6)	5 mg.
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FINANCIAL STATEMENT FOR THE YEAR 1959

LENNERTSON & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS
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MEMBER—AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS
RICHARD J. LENNERTSON, C.P.A.
ST. LOUIS 5, MISSOURI

Missouri State Medical Association,
634 North Grand Blvd.,
St. Louis, Missouri

Gentlemen:

The accounting records of the Missouri State Medical Association were reviewed for the year 1959 and a report thereon is presented together with the following statements:

Exhibit A	Balance Sheet
Exhibit B	Income Statement
Exhibit C	Statement of Committee and Meeting Expenses
Exhibit D	Dues Receivable and Membership by Counties

It should be noted that members' dues are taken into income on the cash basis; whereas the other accounts are maintained on the accrual basis. Items paid in advance, except members' dues, are shown as prepaid and carried forward to the year to which they apply.

Scope of Examination

The Balance Sheet at December 31, 1959 and the Income Statement for the year ended with that date were reviewed. Examinations or tests were made of the accounting records, in the manner and to the extent deemed appropriate, without making a detailed audit of the transactions.

Cash in banks, as shown by the books, was reconciled with the regular monthly bank statements and confirmations received from the depositaries. The petty cash fund of $25.00 was counted. Recorded cash receipts for the year were traced in total into the bank accounts as deposits and disbursements for the period were substantiated by an inspection of paid checks, purchase invoices and other data on file.

Investments with a cost of $130,198.77, as listed in the Balance Sheet, were confirmed by a statement from the custodian, Mercantile Trust Company. Investment income of $3,987.48 consists of the following:

Interest on Bonds	$3,247.81
Add—1959 Share of Net Discount on Purchase of Bonds	443.27
Total	$3,691.08
Less—Loss on Sale of Bonds	170.00
Net Income From Bonds	$3,521.08
Dividends on Stocks	466.40
Total Investment Income	$3,987.48

Selective tests were made of the income and expense accounts for the period. It was noted that space in the JOURNAL was contributed to the United States Treasury Department for bond advertising and to members and widows of members for small classified ads.

Income Statement

The financial result of the activities of the Association for the year 1959 was an excess of income over expenses of $41,789.85 as set forth in Exhibit B. Exhibit C, supporting Exhibit B, presents a summary of committee and meeting expenses for the year.

Balance Sheet

The financial position of the Association at December 31, 1959 is presented in Exhibit A. Additional comments follow on Balance Sheet accounts.

Accounts Receivable—Advertisers $13,255.44, represented the unpaid balances due from Advertisers at the year end. Of this amount $12,524.36 was due from the State Journal Advertising Bureau for the months of November and December 1959.

Unpaid Dues of $1,085.00, offset by a reserve account in like amount, represents 1959 dues of delinquent members carried at the requests of the local societies. Other delinquent members were dropped from membership in accordance with the by-laws. Exhibit D presents a summary of unpaid 1959 dues, prepaid 1960 dues and membership by counties, as shown by the records of the Association.

Furniture and Fixtures continue to be stated in the fixed amount of $1,000. Purchases and repairs during the year in the total of $1,605.57 were charged to expense in lieu of depreciation.

Records and data on file were carefully reviewed for liabilities at December 31, 1959 and it is believed that all current liabilities of substantial amount are included in the Balance Sheet. The by-laws require the Association to furnish financial assistance, not to exceed $300, on each malpractice suit. The Association states that it has no knowledge of any pending suits at the end of the year.

Endowment life policies with disability benefits, on the lives of three employees, were in effect at the beginning of the year. A new employees' pension plan is being worked out by a special committee and $11,290.95 cash is being held in the Treasurer's account pending completion of the plan:

Employees' Contributions	$ 762.75
Association's contribution (Proceeds on cancellation of two of the three endowment policies in effect at beginning of year)	10,528.20
Total Cash	$11,290.95

The third endowment policy is still in effect and has a cash value of $15,018.24. During the year, four new endowment policies were purchased and four employees are now included in the pension plan.

Exhibitors have made advance payments of $4,263.75 for annual session exhibit space and these payments will be taken into income when earned in 1960.

General

Insurance policies were inspected and the following general insurance was in force at the close of the year:

Insurance on	*Type of Coverage*	*Amount*
Furniture and Fixtures	Fire and Extended Coverage (80 per cent co-ins.)	$6,500
Employees	Workmen's Compensation	Statutory
Lessee's Liability	Bodily Injury	$25,000/50,000
Treasurer	Fidelity Bond	$20,000
Employees (except Vice President and Secretary)	Fidelity Bond	$5,000
Automobiles of Executive Secretary and Field Secretary	Non-ownership—Bodily Injury	$50,000/100,000
	Non-ownership—Property Damage	$5,000

Subject to the comments thereon, the attached statements, in our opinion, present fairly the financial position of the Missouri State Medical Association at December 31, 1959 and the financial results of its activities for the year then ended, in accordance with accepted principles of accounting applied on a basis consistent with that of the preceding year.

Yours very truly,
LENNERTSON & COMPANY,
Certified Public Accountants.

EXHIBIT A

Missouri State Medical Association
Balance Sheet, December 31, 1959

Assets		
Cash		
Mercantile Trust Company (Treasurer's Account)	$ 59,684.33	
Mercantile-Commerce National Bank (Secretary's Account)	732.44	
Petty Cash Fund	25.00	$ 60,441.77
Investments at Cost		
U. S. Treasury 4% Bonds 1961-69 Par $35,000	$ 35,102.15	
U. S. Treasury 2⅝% Bonds 1963 Par $10,000	10,000.00	
U. S. Treasury 3% Bonds 1964 Par $5,000	4,732.78	
U. S. Treasury Bonds 2½% 1967-71 Par $50,500	48,334.96	
Pacific Gas & Electric Co. 4½% Bonds 1990 $5,000	5,000.00	
Central and Southwest Corp. 100 Shares	6,345.62	
Johns-Manville Corp. 100 Shares	5,582.34	
Morgan Guaranty Trust Co. of N. Y. 50 Shares	5,106.55	
Standard Oil Company Calif. 91 Shares	5,059.00	
Union Carbide Corp. 37 Shares	4,935.37	130,198.77
Accounts Receivable		
Advertisers	$ 13,255.44	
Mercantile Trust Company—Investment Custodian	892.60	14,148.04
Dues Receivable—Exhibit D		1,085.00
Furniture and Fixtures (at stated value)		1,000.00
Advances for Travel Expenses		235.57
		$207,109.15

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wounds
burns
ulcers
(decubitus, diabetic, varicose)
intertrigo

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Liabilities

Accounts Payable		
Employee	$ 22.25	
Supplies and Expenses	1,484.34	
Payroll Taxes	327.26	$ 1,833.85
Employees' Pension Plan		
Employees' Contributions	$ 762.75	
Association's Contribution	10,528.20	11,290.95
Deferred Credit to Income		
Advance Payments by Exhibitors		4,263.75
Contingent Liability to Members on Malpractice suits—None reported		
Reserve for Uncollected Dues		1,085.00
Reserve for Future Activities		
Balance January 1, 1959	$146,845.75	
Excess of Income Over Expenses for the Year 1959 (Exhibit B)	41,789.85	188,635.60
		$207,109.15

Exhibit B

Missouri State Medical Association
Income Statement for the Year 1959

Particulars	General Activities	Journal Publication	Total
Income			
Dues Received (includes $1.00 per member annually for The Journal)	$107,274.00	$ 3,346.00	$110,620.00
Rentals—Annual Session Exhibit Space	8,050.00		8,050.00
Subscriptions to The Journal—Nonmembers		210.23	210.23
Advertising Space—The Journal		76,233.21	76,233.21
Investments	3,987.48		3,987.48
Collection Fees on A.M.A. Dues	753.00		753.00
Rental Income—Office Space	495.00		495.00
Total Income	$120,559.48	$79,789.44	$200,348.92
Expenses			
Salary—Executive Secretary	$ 8,800.00	$ 4,400.00	$ 13,200.00
Office Salaries	21,942.50	10,971.25	32,913.75
Employees Retirement Insurance Premiums	6,618.20		6,618.20
Office Rent and Light	4,595.43		4,595.43
Postage	2,579.79	977.19	3,556.98
Stationery, Printing and Office Supplies	3,056.72		3,056.72
Dues and Subscriptions	453.14		453.14
Directories and Clipping Service	1,246.20		1,246.20
The Journal—Paper, Printing, etc.		42,528.83	42,528.83
Cash Discounts to Advertisers		335.14	335.14
Commissions on Journal Advertising		6,395.37	6,395.37
Telephone and Telegraph	2,761.96		2,761.96
Insurance—General	308.37		308.37
Insurance—Blue Cross	315.00		315.00
Professional Fees	3,062.08		3,062.08
Taxes—Payroll and Personal Property	1,397.88		1,397.88
Traveling Expense—Executive Secretary	2,281.76		2,281.76
Traveling Expense—Field Secretary	2,522.09		2,522.09
Committees and Meeting Expenses (Exhibit C)	28,695.06		28,695.06
Equipment Purchases and Repairs in lieu of Depreciation	1,605.57		1,605.57
General Expenses	245.36		245.36
Custodian Fees—Investments	239.18		239.18
Student Awards	225.00		225.00
Total Expenses	$ 92,951.29	$65,607.78	$158,559.07
Excess of Income over Expenses for the Period	$ 27,608.19	$14,181.66	$ 41,789.85

Exhibit C

Missouri State Medical Association
Statement of Committee and Meeting Expenses
For the Year 1959

Annual Session		$ 8,947.31
Council Meetings and Councilors' Expenses		4,978.43
Delegates to A.M.A.		3,740.16
Public Relations		7,486.59
Woman's Auxiliary		1,190.76
Committees:		
Ageing	$ 56.90	
Cancer	16.28	
Civil Defense	19.50	
Councilor District	349.77	
Corporate Practice	162.10	
Health and Public Instruction	63.95	
Infant Care	281.40	
Maternal Welfare	29.92	
Medical Economics	131.09	
Public Policy and Public Relations	613.21	
Publications	22.06	
Rural Medicine	167.73	
Scientific and Postgraduate Work	348.77	
Tuberculosis	73.92	
Venereal Disease	15.21	2,351.81
Total		$28,695.06

Exhibit D

Missouri State Medical Association
Dues Receivable and Membership by Counties
December 31, 1959

MEMBERSHIP

Counties	*Active*	*Junior*	*Honor*	*Total*	*Unpaid Dues*	*Prepaid Dues*
Andrew	5		1	6		
Audrain	17		1	18		
Barton-Dade	6	1		7		
Benton			2	2		
Boone	77	13	4	94		$35.00
Buchanan	70	3	14	87		
Butler-Ripley-Wayne	34		1	35	$ 35.00	
Callaway	9	4	7	20		
Cape Girardeau	39	1	6	46		
Carter-Shannon	1			1		
Chariton-Macon-Monroe-Randolph	23	2	4	29		
Clay	47	8	4	59		
Clinton	6			6		
Cole	38	1	4	43		
Cooper	10	1	1	12		
Dallas-Hickory-Polk	6		1	7		
Dunklin	17	2	4	23		
Franklin-Gasconade-Warren	24			24		
Grand River	41	1	7	49	35.00	
Greene	137	3	11	151		
Henry	9	3	1	13		
Howard	7			7		
Jackson	591	45	125	761	105.00	
Jasper	63	1	12	76		
Jefferson	17			17		
Johnson	9	1	2	12		
Lafayette-Ray	20	1	1	22		
Lewis-Clark-Scotland	2		1	3		
Lincoln-St. Charles	22		2	24	35.00	
Marion-Ralls-Shelby	26		3	29		
Mid-Missouri	33	2		35		
Miller	2			2		
Mineral Area	25	1	2	28		
Moniteau	5			5		
Montgomery	3		1	4		
Morgan	4			4		
Nodaway-Holt-Atchison-Gentry-Worth	20	1	2	23		
North Central	9		5	14		
Ozarks	39	6	6	51		
Pemiscot	14	9	2	25	52.50	
Perry	10		2	12		
Pettis	23		8	31		
Pike	6	3	2	11		
Platte	5	2		7	35.00	
St. Louis City	981	173	118	1,272	700.00	
St. Louis County	384	18	33	435	35.00	
Semo	28	4	6	38	52.50	
Saline	20	2	2	24		
South Central	16	2	5	23		
Webster	2	1	1	4		
West Central	27	2	10	39		
Totals	3,029	317	424	3,770	$1,085.00	$35.00
					(A)	

(A) Delinquent dues of members at December 31, 1959, carried at the requests of local societies.

1960 Budget

Salaries	$ 62,338.00
Office Rent	4,700.00
Postage	4,500.00
Printing and Stationery	5,000.00
Journal Expense	50,000.00
Telephone & Telegraph	2,800.00
Insurance and Retirement	6,500.00
Professional Fees	4,000.00
Taxes—Payroll	1,850.00
Travel Expense	7,000.00
Committee	43,850.00
Furniture and Fixtures	1,500.00
General Expense	3,000.00
Total	$197,038.00

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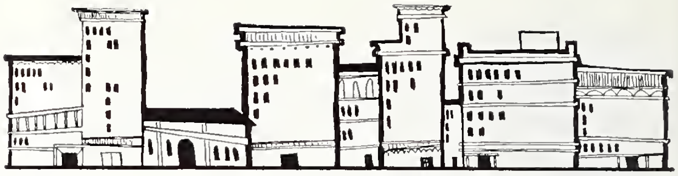
From the Medical Schools



WASHINGTON UNIVERSITY

Memorial Service

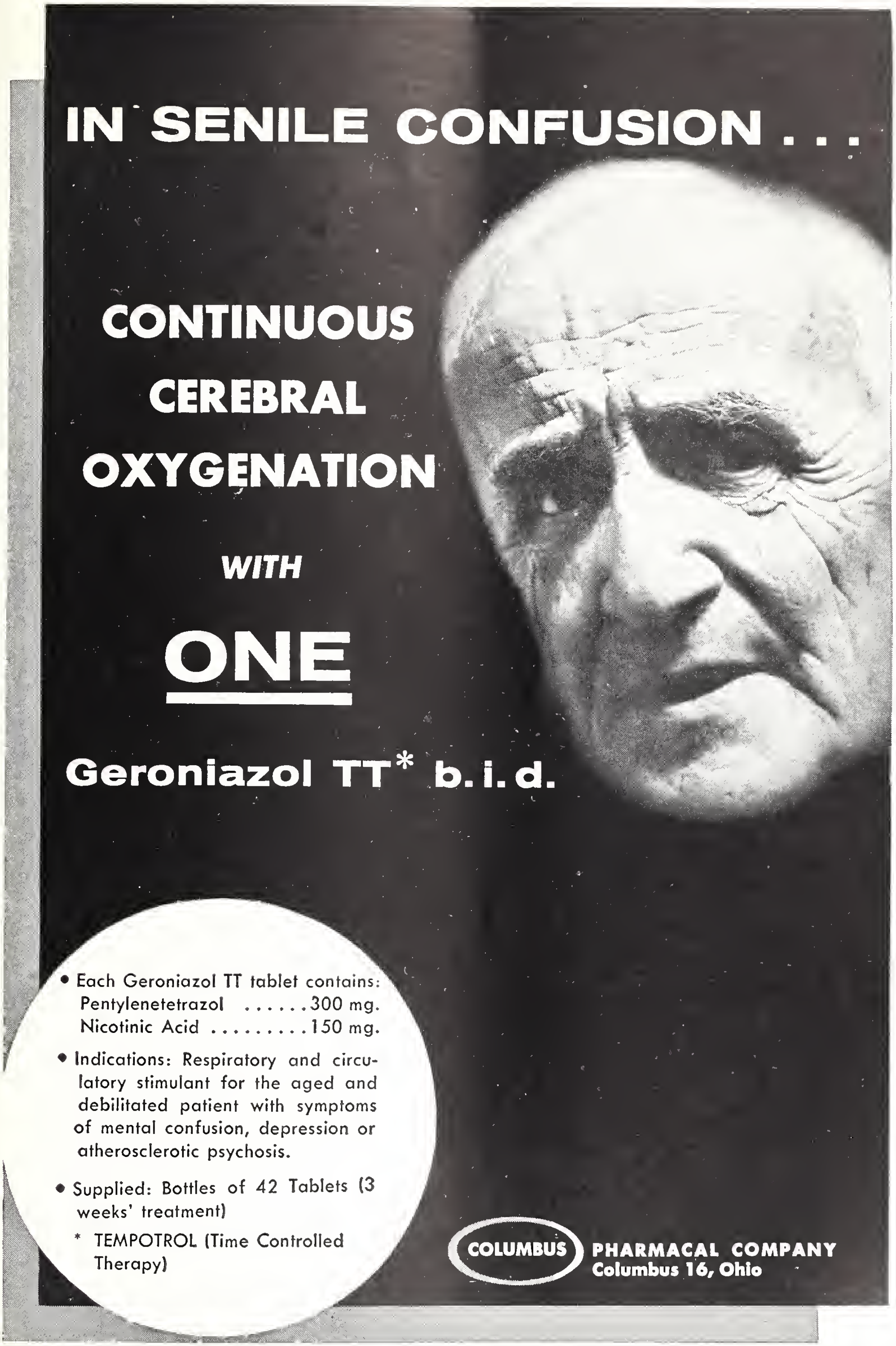
Memorial services for Dr. Leo Loeb, internationally noted professor emeritus of pathology at Washington University School of Medicine, were held Sunday, January 24, in Graham Memorial Chapel on the University campus. Dr. Loeb died of infirmities of age Monday, December 28, 1959, in his home in Clayton, Missouri. He was 90 years old. Primary speaker at the services was Dr. Ernest W. Goodpasture, professor emeritus of pathology at Vanderbilt University and visiting professor at the University of Mississippi. Members of the Washington University School of Medicine staff taking part were Dr. Carl V. Moore, Busch professor and head of the department of medicine; Dr. W. Stanley Hartroft, Mallinckrodt professor and head of the department of pathology; and Dr. Edward W. Dempsey, head of the department of anatomy and dean of the medical school. Also participating were Edgar Taylor, honorary canon of Christ Church Cathedral, and headmaster of Taylor School for Boys; and Howard Kelsey, Washington University organist. In commemoration of Dr. Loeb's work while director of the pathology department of Barnard Free Skin and Cancer Hospital, Edwin S. Jones, president of the Barnard board, has announced the establishment of the Leo Loeb Cancer Research Memorial Fund. Contributions may be sent to the hospital at 600 S. Kingshighway. During his 53 years of scientific research, Dr. Loeb was the first to show that sex hormones, in certain circumstances, are a major cause of cancer. He demonstrated that susceptibility to cancer is inherited, disproving the then widely-held belief that it was infectious. He made contributions to the fields of tissue and tumor growth, tissue culture, physiology of generative organs and pathology of circulation. Born Sept. 21, 1869, in Mayen, Germany, Dr. Loeb received his medical degree from the University of Zurich in 1897. In that year, he came to the United States and settled in Chicago, where he practiced medicine briefly. From Chicago, he was successively a faculty member of the Universities of Illinois, McGill and Pennsylvania. Dr. Loeb came to St. Louis in 1910 as director of the pathology department of St. Louis Skin and Cancer Hospital, the former name of Barnard Free Skin and Cancer Hospital. In 1915, he became professor of comparative pathology at Washington University, and in 1924 he was appointed professor of pathology and head of the department; a position he retained until his retirement in 1937. He was a past president of the American Association of Pathologists and Bacteriologists and of the Society of Cancer Research. Dr. Loeb's only immediate survivor is his wife. They had no children. A brother, the late Dr. Jacques Loeb, was also widely known for contributions to cancer research.

Refresher Course

A refresher course for graduate occupational therapists has been initiated by the Department of Occupational Therapy at Washington University School of Medicine through a $22,782 grant from the Office of Vocational Rehabilitation of the United States Department of Health, Education and Welfare. In announcing the program, Dr. Edward W. Dempsey, dean of the medical school, said that the grant provides scholarships of $550 for residents of Metropolitan St. Louis and $1,200 for non-residents. Staff members of both the Medical School and the Department of Occupational Therapy are conducting the intensive review of the basic principles and techniques of occupational therapy and new concepts and methods. According to Miss Martha Matthews, director of the department, lectures and classes are scheduled in anatomy, kinesiology, physiology, neurology, orthopedics, psychiatry, surgery, medicine, occupational therapy media and occupational therapy application. The refresher course is open to non-practicing therapists who wish to return to the field and to those whose experience is limited in scope and desire to broaden their effectiveness.

Grants

The United States Public Health Service has awarded two medical investigators at Washing-



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ton University School of Medicine supplemental funds of $47,581 to continue current research projects. Dr. Sol Sherry, professor of medicine, has received an additional $45,000 for studies of the basic chemistry of fibrinolytic enzymes and the application of this information for practical therapy in patients. Supplementary funds of $2,581 awarded Dr. Hugh Chaplin, Jr., assistant professor of medicine and preventive medicine and associate dean of the medical school, will bring the total amount of the grant which supports his research to more than $50,000 over a five year period. The study, which is now in its fourth year, involves the causes of anemia in patients with cancer, including the leukemias. An extension of the research includes a possible new approach to the treatment of patients with aplastic anemia.

Lecture

Dr. Leon J. Epstein, chief of research of the State of California Department of Mental Hygiene, discussed the pharmacological approach to the treatment of depression in January at the Washington University-Barnes Hospital Medical Center. The lecture was in conjunction with the January meeting of the St. Louis Society of Neurology and Psychiatry and was open to the medical public. Dr. Epstein also visited various departments at Washington University School of Medicine as guest of Dr. Eli Robins, professor of psychiatry.

Appointment

Dr. Vincent Daniel Bayliss, associate professor of medicine at the Medical College in Trivandrum, Kerala, India, has been appointed fellow in medicine at Washington University School of Medicine. The appointment is under the auspices of the International Cooperation Administration and within the general framework of the program of upgrading medical education throughout India. Following his year of training under Dr. Carl V. Moore, Busch professor and head of the department of medicine, Dr. Bayliss will resume his position at the Medical College in Trivandrum.

UNIVERSITY OF MISSOURI

Meetings and Talks

On Tuesday, December 23, 1959, a Christmas dinner, arranged by Dr. Vernon E. Wilson, Dean of the Medical School, was held in the Medical Center cafeteria by the Medical Center Administration for hospital and teaching staff members and employees.

The Boone County Medical Society held a general business meeting on January 5 in the Medical Center Auditorium.

Guest lecturer for the Sigma Xi Lecture Series, which was held in the Medical Center Auditorium on January 13, was Dr. Ernest R. Sears, geneticist with the U. S. Department of Agriculture and research associate with the Department of Field Crops at the University. He spoke on the topic of "The Origin and Evolution of Wheat."

The monthly meeting of the Medical History Group was held in Room M437 of the Medical Sciences Building on January 14, with guest speaker, Dr. Dallas K. Meyer, professor of physiology, who spoke on "Medical Aspects of the Lewis and Clark Expedition of 1894 and Long's Expedition of 1820."

A Student Award Convocation was held in the Medical Center Auditorium on January 14, for the purpose of granting awards to medical students, in recognition of outstanding scholarship and performance. Presentation of the awards was made by Dr. Theodore Keats, professor of radiology, who is chairman of the Committee on Scholarships and Awards.

The Christian Medical Society sponsored a talk by Dr. Vernon E. Wilson, Dean of the Medical School, on January 16 in the Medical Center Auditorium who spoke on "The Place of Christianity in Medicine Today."

Trips and Talks

On January 9, 1960, Dr. Vernon E. Wilson attended a special meeting for Deans of Medical Schools, in Chicago. This meeting was sponsored by the Association of American Medical Colleges, and the topic discussed was Federal Support of Medical Education.

The Missouri State Medical Association sponsored a meeting of two of its committees: Committee on Rural Medical Services and Committee on Medical Education and Hospitals on January 17, in Jefferson City. Dr. Wilson attended the meeting of these two committees.

Dr. Wilson and Dr. Phillip Hitchcock, associate professor of anesthesiology, attended a meeting sponsored by the Tri-County Medical Society held in Hannibal, January 19. Dr. Hitchcock, guest speaker, spoke on "Problems in Anesthesia." Dr. Wilson also spoke briefly on the Medical Center.

Dr. Wilson and Dr. Philip Hitchcock, asseveral civic organizations in Kansas City on January 20, where a study of the employment of the aged in Kansas City was discussed.

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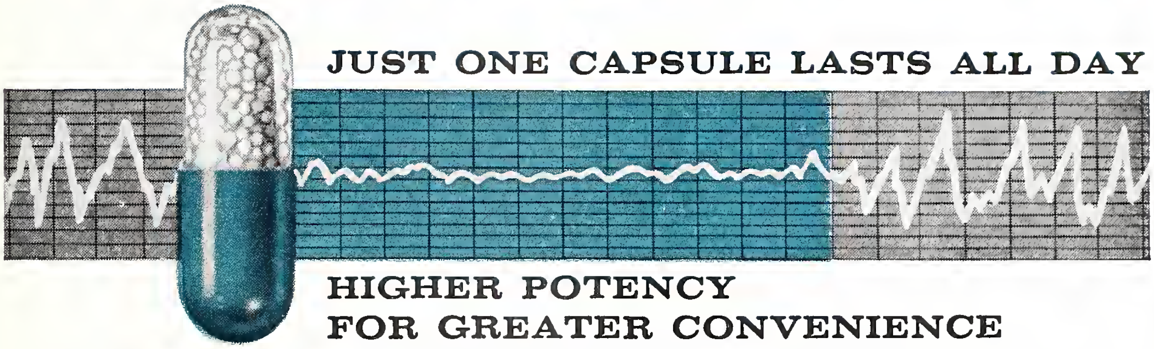

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Dr. Gwilym S. Lodwick, associate dean and professor and chairman of the Department of Radiology, and Dr. C. Thorpe Ray, professor of medicine and chairman of the Department, attended a meeting in Mount Vernon on Sunday, January 10, sponsored by Missouri State Sanatorium and the Missouri Tuberculosis Association. The program concerned diagnosis and treatment of diseases of the chest. Dr. Lodwick spoke on the "Current Trends in Medical Education." Dr. Ray spoke on "Management of the Patient With Cor Pulmonale With Special Emphasis on Cardiac and Electrolyte Problems."

Dr. Lodwick and Mr. John Perry, assistant director of Hospital, had Dr. Charles C. Hedges, a member of the staff of the Council on Medical Education and Hospitals of the A.M.A., as a visitor on January 18 and 19. This visit was sponsored by the Council on Medical Education and Hospitals, American Medical Association, with the purpose of surveying the residency programs.

Dr. Frank B. Engley, Jr., Ph.D., assistant dean and professor and chairman of Microbiology, and Mr. John Perry, conducted a tour of the Medical Center in the interest of Dr. Winston K. Shorey, associate dean, and Dr. John C. Finerty, assistant dean, from the School of Medicine, University of Miami at Coral Gables, Florida on January 15. The purpose of their trip throughout the country was to survey the medical centers, the construction of buildings, for preparation in planning their own new medical center in Florida.

Other recent guests in the Dean's office included Dr. Addison Duval, Director, Division of Mental Diseases in Jefferson City, and Dr. Alfred Baur, superintendent of State Hospital No. 1 in Fulton.

Dr. Frank B. Engley, Jr., assistant dean and professor and chairman of the Department of Microbiology, visited Central College on January 14, 1960, where he spoke to a group of premedical students and other interested persons on "Premedical Training and Medical Education."

Dr. James T. Barrett, associate professor of microbiology, showed two films and spoke on "Technics in Bacteriology" and "Career in Bacteriology" to approximately 200 Hickman High School biology students at Hickman High School in Columbia on December 14, 1959.

On December 10, Dr. Herbert S. Goldberg, associate professor of microbiology, presented a seminar on "antibiotics" at the University of Missouri School of Veterinary Medicine.

On January 11, Dr. David Hall, professor of obstetrics and gynecology, lectured on "Gynecological Diagnosis" at a meeting of the Cole County Medical Society in Jefferson City.

Dr. Joseph E. Flynn, professor and chairman of the Department of Pathology, attended a meeting of the Pathology Test Committee of the National Board of Medical Examiners, which was held in Philadelphia on January 8 and 9.

On January 13, Dr. Flynn attended a meeting of the Board of Directors of the Leukemia Guild in St. Louis.

Dr. Vincent P. Perna, assistant professor of pathology and assistant director of Central Laboratories, attended a symposium on "Blood, Trauma and Fluids" at Walter Reed Army Institute of Research in Washington, D. C., from December 14 through 17. The symposium was part of the Medical Education for National Defense (MEND) program.

A guest in the Department of Physiology and Pharmacology was Dr. Enrique Strajman, professor of biophysics at the Medical School of Buenos Aires, who visited here January 13.

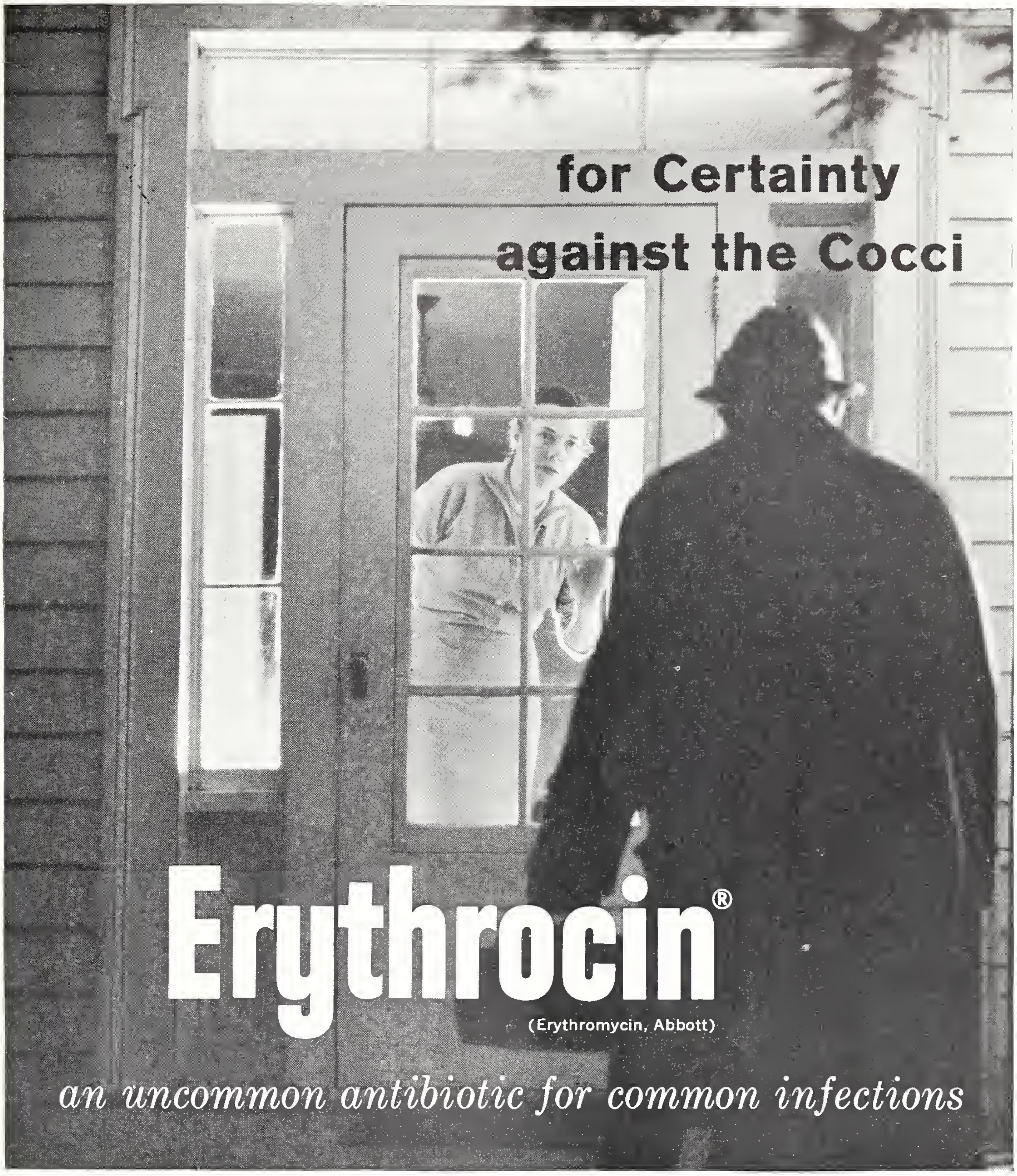
On December 17 Dr. Hugh E. Stephenson, Jr., professor and chairman of the Department of Surgery, spoke to the Mid-Missouri Medical Society's meeting held in Rolla on "Some Recent Advances in Surgery."

At a Symposium on Chest Diseases, which was sponsored by the Missouri Academy of General Practice and co-sponsored by the Missouri Chapter, American Trudeau Society; Missouri Chapter, American College of Chest Physicians; and the Missouri State Sanatorium, held at the Missouri State Sanatorium at Mount Vernon on January 9, Dr. Stephenson served as moderator for the "Clinical-Pathologic-X-ray Conference," presenting four thoracic surgical cases.

Dr. John Buesseler, associate professor of ophthalmology, conferred with Drs. Braley and Blodi at the University of Iowa Hospital, in Iowa City, regarding final details of a joint National Institutes of Health Training Grant Application in Ophthalmic Pathology. On December 29 through 31, Dr. Buesseler, while in Chicago, conferred with Dr. Frank Newell at the University of Chicago regarding utilization of the Photo-Coagulator instrument and observed it in use on some of Dr. Newell's patients.

On December 22, Dr. Ian Thompson, associate professor of urology, attended a meeting of the Kansas City Urological Society in Kansas City.

Dr. Carl Almond, assistant professor of surgery, spoke to a group on January 5 on "Care of the Tracheotomized Patient." His talk was sponsored by the In Service Education for Nursing group.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Dr. J. William Thompson, Chief of the Department of Surgery at DePaul Hospital in St. Louis, and Dr. Paul J. Bettonville, also of DePaul, were recent guests of the Department of Surgery.

An agreement establishing an eye bank at the University of Missouri has been signed by the University of Missouri Medical School and Lions Clubs of Missouri, which will purchase necessary equipment and support the eye bank with annual grants. Dr. Vernon E. Wilson, Dean of the School of Medicine, indicated that the eye tissue bank will collect and preserve eye tissue from donated eyes for distribution throughout Missouri as well as a larger adjacent area, especially to the West. While its primary function will be in the field of tissue preservation and processing, Dean Wilson expects to have material not only for corneal transplants but also in the form of vitreous humor for various eye surgery.

New Appointments

Dr. Massoud Eghrari assumed his duties as assistant instructor in surgery and second year resident as of January 1, 1960. Dr. Eghrari received his M.D. in 1956 from the University of Paris, France, and passed the American Foreign Medical Graduates Qualification Examination in September 1959.

Dr. Robert E. Bregant has been appointed assistant instructor in medicine and will assume his duties as of July 1, 1960. Dr. Bregant received his A.B. in 1953 from Central College and his M.D. in 1959 from St. Louis University. He is presently interning at the St. Louis University Hospital.

Dr. Morris P. Gordon will assume his duties as assistant instructor in medicine as of July 1, 1960. Dr. Gordon received his M.D. in 1959 from the University of Missouri School of Medicine and at the present is serving his internship at the St. Louis County Hospital in Clayton.

Dr. Samuel H. Gray has been appointed assistant instructor in surgery and first year resident effective July 1, 1960. Dr. Gray received his A.B. in 1955 from Washington University and his M.D. in 1959 from the University of Missouri.

Dr. Loren H. Hartley has been appointed assistant instructor in medicine and first year resident effective July 1, 1960. Dr. Hartley received his A.A. in 1954 from the Joplin Jr. College and his M.D. in 1959 from the University of Missouri.

Dr. Wilber B. Spalding, Jr. has been appointed assistant instructor in surgery (ophthalmology) and first year resident effective October 1, 1960. Dr. Spalding received his B.S. in 1953 and his A.B. in 1955, both from the University of Missouri. He received his M.D. in 1959 from the Kansas University Medical School. Dr. Spalding is presently an intern at Orange County Hospital, Orange, California.

Dr. Gerard J. Voelkers, Jr., has been appointed assistant instructor in surgery and first year resident, effective July 1, 1960. Dr. Voelkers received his A.B. in 1953 from the University of Missouri and his M.D. in 1957 from Indiana University School of Medicine.

Preceptorships in General Practice

The second group of fourth year medical students who elected to serve a Preceptorship in General Practice were assigned to the following physicians in Missouri and will serve as preceptees for the period of January 16 through February 28, 1960: *Preceptor:* Dr. Arthur Graves, Mount Vernon; Dr. Ben Hurst, Lebanon; Dr. T. R. McArtor, Browning; Dr. Stephen Parks, Bloomfield; Dr. C. T. Shaw and Dr. G. M. Workman, Hermann. *Students:* J. Larry Dowell, Gallatin; William Brody, Kansas City; Leo Biese, Columbia; Loren Broaddus, Sedalia; Donn Duncan, Kansas City.

Physicians who serve as preceptors are selected by the Committee on Medical Education and Hospitals of the Missouri State Medical Association, and if they are willing to serve, are appointed by the Board of Curators of the University of Missouri as Preceptors in General Practice. The student assigned to them is under their direct supervision for the period of the assignment and will be graded by them for performance during that period.

SAINT LOUIS UNIVERSITY

Lectures

Dr. Alrick B. Hertzman, director of the department of physiology, attended lectures in aerospace conducted by the School of Aviation Medicine, U.S.A.F. Aerospace Medical Center at Brooks Air Force Base near San Antonio, Texas, January 11 to 15. The symposium was sponsored by the Medical Education National Defense Program. Those attending the symposium included senior military officers from this country and abroad and civilian scientists.

Dr. C. Rollins Hanlon, director of the department of surgery, was invited to participate in a postgraduate medical study offered by the

When blood pressure must come down

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University of Kansas Medical Center on "The Heart, Rheumatic and Congenital Heart Disease" on January 18, 19, 20 and 21. Dr. Hanlon lectured on surgery for the mitral valve and on the management of patients after cardiac surgery.

Dr. James E. Lewis, associate professor of clinical surgery, spoke on "Diagnosis and Management of Abdominal and Thoracic Surgical Problems in Infants and Children" before the Craighead-Poinsett Society in Jonesboro, Arkansas, during the month of December. He also addressed residents at St. Louis County Hospital on "Low Intestinal Obstruction and Hirschsprung's Disease in the Newborn" and residents at Homer G. Phillips Hospital on "Intestinal Obstruction in the Newborn."

Dr. Francis X. Paletta, associate professor of clinical surgery, gave a paper before the meeting of the American Society for Surgery of the Hand in Chicago. Dr. Paletta's paper was entitled "Prolonged Tourniquet, Ischemia of Extremities."

Dr. R. Walter Schlesinger, director of the department of microbiology, delivered a paper before a symposium in New York which was attended by virologists from all over the world. The program entitled "Symposium on Perspectives of Virology" was sponsored by The Hartz Mountain Bird Seed Company. Mr. Gustav Stern, organizer of the symposium, was host to the meeting. Dr. Scheslinger's paper was entitled "Vagaries of Adenovirus—Cell Complexes."

Dr. Seymour Cohen, professor of biochemistry at the University of Pennsylvania School of Medicine, delivered a lecture at the School of Medicine on January 18, which was sponsored by the department of microbiology.' Dr. Cohen's lecture was entitled "Virus-Induced Cellular Function."

Dr. Alick Isaacs, a member of the medical research council's unit of the National Institute of Medical Research at Mill Hill, London, delivered two lectures sponsored by the department of microbiology January 11 and January 12. Dr. Isaacs lectured on "Immunity to Viral Infections" and "The Role of Interferon in Cellular Resistance to Virus Infection."

Grant Awards

Dr. Alfred W. Richardson, professor of physiology at the School of Medicine, has been awarded a grant renewal of $14,260 by the Office of Naval Research for research on biological effects of microwaves of radar frequencies. Dr. Richardson is investigating changes in albino rats exposed to an excessive magnitude of radar. In this way, he is attempting to find out what might happen to humans exposed to the same conditions. His research is aimed at finding out what physiologic and pathologic changes occur in animal tissues as a result of radar exposure. While radar is known to generate heat production in human and animal tissues, the full extent of some of the effects are unknown. The basic aim of his investigation is to insure safety to the thousands of workers in radar fields. These people are engaged in occupations at radar installations set up along the coast lines of the nation.

Dr. Richardson is also attempting to determine whether radar frequencies might be used in physical medicine for the treatment of patients, when heat therapy is recommended by the family physician.

Dr. Richardson serves as consultant on the biologic effects of heat producing microwaves and a space project for the three branches of the Armed Forces. Last year he completed the design of a pocket sized radar and microwave detector, which has aided the Armed Forces as a safeguard against radiation from guided missile gracking equipment. He is one of the first radar investigators in this country, having worked on this problem since 1946.

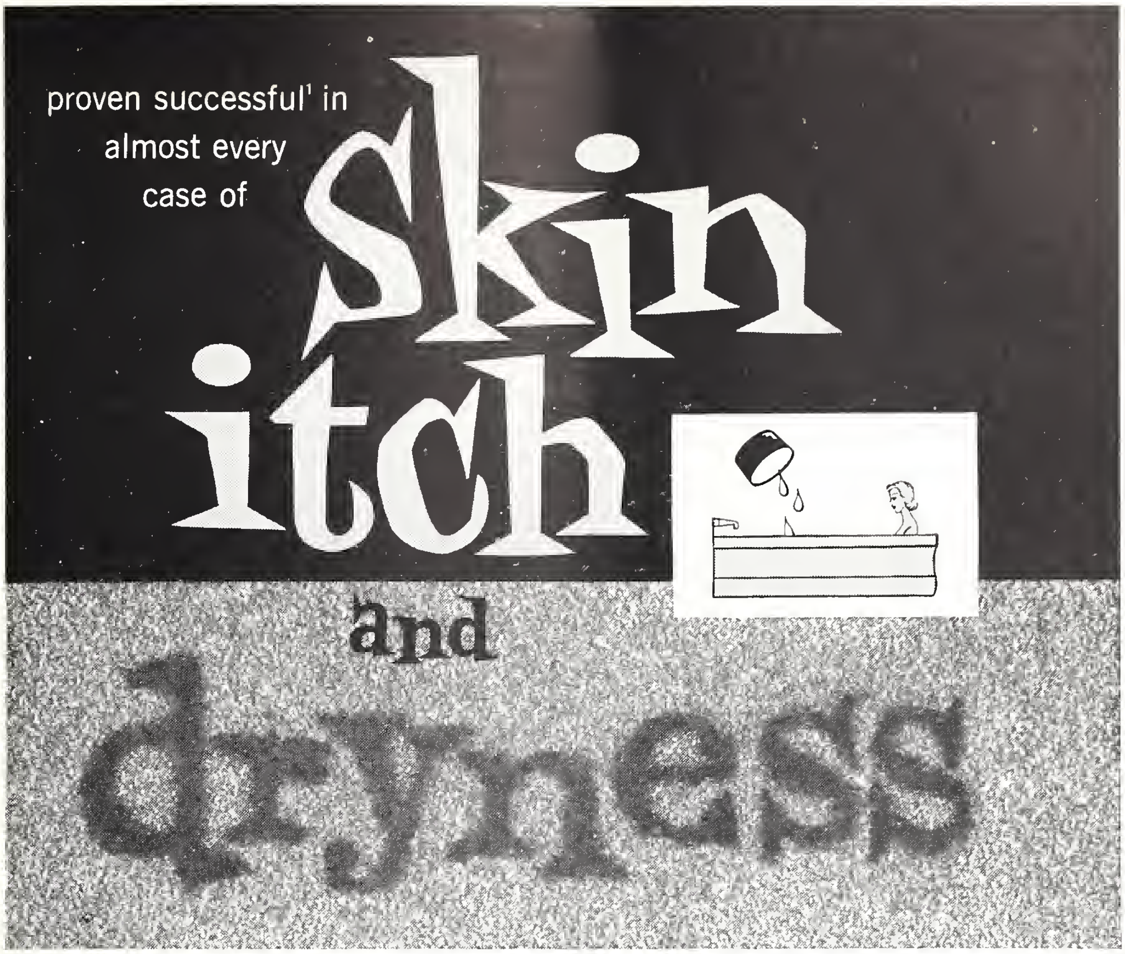
Dr. Pietro O. Bramante, assistant professor of physiology at the School of Medicine, has been awarded a new research grant by the United States Public Health Service totaling $27,347 for a three year period.

Dr. Bramante is currently investigating the energy exchanges and respiratory metabolic phenomena of albino rats and hamsters in relationship to their endocrine function, especially the thyroid gland. He is also studying the mineral and water content of their body tissues.

For this study, Dr. Bramante has developed and constructed ultra-sensitive electronic metabolic apparatus by which it is possible to register continuously, for many hours, very small changes in the oxygen consumption, respiratory movements and spontaneous muscular activity of three animals at one time, under precise experimental conditions.

With this modern method of investigation it is now possible to detect and precisely quantitate the slightest and fastest effects of various drugs and compounds injected into the animal during the metabolic determination.

Dr. Bramante is a graduate of the University of Rome School of Medicine. He has been working on metabolic problems for several years both at the Research Laboratories of the Department of Medicine of the University of Rome, then at



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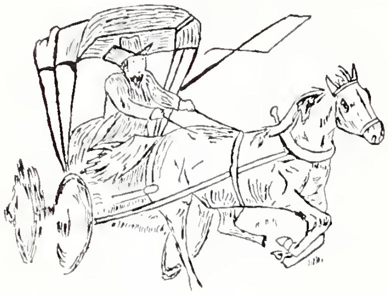
LEO H. POLLOCK, M.D.

Missouri Medicine in Review



FORTY YEARS AGO

Dr. W. P. Raynor's report shows that there are 349 cases of trachoma in a total of 4,439 children examined in the schools of six counties. If this average should hold true for the entire section of the state it would mean that almost 8 per cent of the children are trachomatous. The report does not mention trachoma among adults. On that basis it can be said that there will be an addition of 261 persons to the blind population of the six counties that have been surveyed, all among children, unless they are given persistent and intelligent treatment.

Dr. S. W. Chandler, Cassville, has been appointed county physician for Barry County.

Dr. R. B. Tyler, Health Commissioner of Joplin, has announced his candidacy for presiding judge of Jasper County.

Dr. Robert Vinyard of St. Louis, who has practiced in that city for a number of years, has accepted the position of assistant physician at the Frisco Hospital, Springfield.

Dr. G. C. Eggers, Clayton, who has been health commissioner of St. Louis County for a number of years, has been reappointed to the same position by the county court and also appointed deputy state health commissioner for the county.

The supply of radium held by Missouri physicians for the treatment of conditions thought to be amenable to its influence, has been augmented recently by Drs. Vilray P. Blair and Ellis Fischel of St. Louis, who have added 100 mgs. to their equipment.

The railroad fare from St. Louis to New Orleans, where the American Medical Association will hold its meeting April 26-30, will be $41.06 for the round trip. The return limit expires May 31. The Pullman fare for one lower berth one way is $4.59; drawing room, $16.20, for which two railroad tickets are necessary.

Several communities have written that they are in need of a physician.

Dr. Fred T. Murphy, formerly professor of surgery in Washington University Medical School, St. Louis, made a survey of the medical school of Yale University at the request of the Yale Corporation and recently submitted his re-

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St. Louis University—Continued

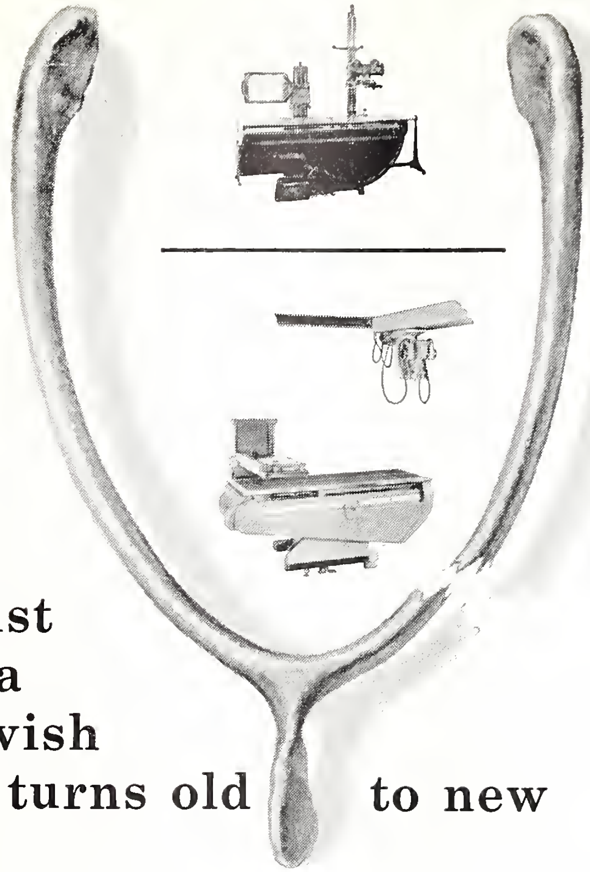
the King Gustaf's Institute of the University of Stockholm, and, since 1952, at St. Louis University.

Cardiac Auscultation Course

School of Medicine faculty participated in presenting a cardiac auscultation course Wednesday, February 24 and Thursday, February 25, at Cardinal Glennon Memorial Hospital, 1465 Grand Boulevard. Participants were: Dr. Donald W. Bussmann, director, heart sound laboratory and senior instructor of internal medicine; Dr. Mary A. Davis, assistant in pediatrics; Dr. James L. Donahoe, instructor in pediatrics, Dr. George W. Duane, instructor of internal medicine; Dr. James G. Jannel, Jr., associate professor of clinical medicine and director, division of cardiology; Dr. J. F. Gerard Mudd, assistant professor of internal medicine and director, cardiac catheterization laboratory; Dr. John A. Nuetzel, assistant professor of clinical medicine and Dr. Robert Potashnick, assistant professor of clinical medicine.

During the last five years the course has been given on twelve occasions to physicians from throughout the State of Missouri and Illinois. The sole aim of the course is to improve the physician's ability to recognize and properly interpret heart sounds and murmurs with his stethoscope.

Topics to be covered during the course include: Technic of listening, hypertensive heart disease, ausculatory findings in congenital heart diseases, natural history of rheumatic involvement of the mitral valve and many others.



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port with recommendations which the committee of educational policy of the institution used as a basis of recommendations for developing the medical school to the highest type of modern medical teaching, including preclinical and clinical years.

TWENTY-FIVE YEARS AGO

St. Louis bears the second highest diphtheria mortality rate of 17 large cities. Only 18 per cent of the preschool age group and 28 2/3 per cent of the 5 to 9 age group are immunized against diphtheria.

The annual meeting of the Council convened in Columbia, November 19, with thirty-six members present. Dr. A. R. McComas, Sturgeon, Chairman, presided. Two appointments made previously by the President, Dr. C. T. Ryland, Lexington, were approved by the Council. These were the appointment of Dr. Walter Baumgarten, St. Louis, as a member of the Committee on Publication to fill the vacancy created by the death of Dr. M. A. Bliss, St. Louis, and that of Dr. Charles H. Dixon, Moberly, as Councilor of the 10th District to fill the vacancy created by the death of Dr. Don A. Barnhart, Huntsville.

The Clay County Medical Society is enthusiastically preparing for the Annual Session to be held in Excelsior Springs, May 6, 7, 8 and 9, 1935. Dr. Joseph Dauksys, Excelsior Springs, was selected by the Council as chairman of the Local Committee on Arrangements. Other members of that committee were Drs. Eugene B. Robichaux, J. E. Baird, J. E. Musgrave and J. J. Gaines, Excelsior Springs.

The Buchanan County Medical Society met in the Missouri Methodist Hospital, January 2, Dr. E. F. Cook, president, in the chair. Thirty-five members were present.

The Jasper County Medical Society held a dinner meeting at the Connor Hotel in Joplin on January 8 with eighty-two members and guests present. The officers for 1935 were installed as follow: President, Dr. W. S. Loveland, Dr. H. D. McGaughey, Joplin; censors, Dr. L. B. Clinton, Carthage, and Dr. W. L. Post, Joplin.

TEN YEARS AGO

"Four score and" twenty years ago, a group of physicians formed the Missouri State Medical Association. At the 1950 Annual Session, members of the Missouri State Medical Association will celebrate the culmination of one hundred years of organized medicine in Missouri. The session will be held at Hotel Jefferson, St. Louis, March 26, 27, 28, 29.

Brigadier General Wallace H. Graham, Washington, D. C., has been appointed Special Assistant on Medical Reserve Affairs to Major General Harry G. Armstrong, Air Surgeon General.

Buford G. Hamilton, M.D., Richmond, was appointed Director of the Missouri Division of Health on February 14 by Governor Forrest Smith. Dr. Hamilton replaces the late D. F. Adams, M.D., Jefferson City, who was acting Director.

Melvin A. Casberg, M.D., St. Louis, was elected to the board of directors of the National Society for Medical Research at a recent annual session of the society in Chicago.

The Rehabilitation Institute, 3101 Gillham Plaza, Kansas City, has just completed two years of work with the disabled of that area.

WASHINGTON

(Continued from page 270)

decision I am going out to work to carry out their programs.

'Mr. Alger: I know how you define democratic. When the gentleman from Illinois asked you about Sweden you said Sweden was the most democratic of countries; and it is a socialistic government. I suppose that is what you mean by democratic. I know that many countries in this world that disagree with us in philosophy take our same words and redefine them.

'Mr. Reuther: Is the economy of Sweden nationalized?

'Mr. Alger: You have just said that a great deal of it was.

'Mr. Reuther: Very little of it is nationalized. I said less than 10 per cent, and what has been nationalized was nationalized by the conservative government, not the labor government; the socialist government, as you call it. It is the conservative government that nationalized these basic industries, and it is a very small percentage.

'Mr. Alger: I am wandering off again. I really have some other questions.

'Before I wandered into Sweden there for a moment, you pointed out the doctors ought to save their money. The doctors have the feeling, whether you share it or not, that much good is being done in voluntary programs. They are working with insurance people trying to build better voluntary programs. You say . . . that the powerful insurance companies, and this is almost verbatim, obstruct these efforts toward this kind of a bill, not because they can do the job, but because they don't want the government to

(Continued on page 368)

Tetracycline Phosphate Complex (TETREX®)
U.S. PAT. NO. 2,791,609
in the Therapy of
ACUTE PHARYNGITIS, ESPECIALLY WITH LYMPHADENITIS

Ideally, selection of the proper antibiotic for treatment of acute pharyngitis should await the laboratory reports on the susceptibility of the infecting bacteria. But the busy practitioner who sees many patients a day during the upper respiratory infection season may sometimes find it difficult to avoid the empirical choice of an antibiotic. Unfortunately, this practice may sometimes result in therapeutic failure.

No matter what the pressure of the immediate situation, it is worthwhile to consider taking a bacterial specimen from the infected pharynx for culture and sensitivity studies before starting treatment. Thus, a rational basis will be provided for changing the antibiotic should the first choice prove ineffective.

Which Antibiotic?

All other things being equal, the drug of choice is the one to which the pathogen is most susceptible. But if the exigencies of the situation force the physician to a prompt use of antibiotic, a broad-spectrum preparation that produces immediate high blood levels (e.g., tetracycline phosphate complex, TETREX) probably has the best chance of controlling the pathogen.

Later, the laboratory report frequently may indicate that any one of several antibiotic agents would be equally effective against the particular microorganism in question. In such a case other factors such as frequency and severity of side effects, sensitizing potential and toxicity should be considered.

If the acute pharyngitis in question should be due to gram-negative Klebsiella[1], penicillin will be of no value, nor will erythromycin be effective. However, this organism is susceptible to tetracycline. If the pathogen should turn out to be gram-positive Streptococcus or Staphylococcus, then penicillin, erythromycin, and tetracycline may all be effective against it.

Penicillin, however, in addition to having a limited spectrum, also causes many minor and some serious sensitivity reactions. In a recent survey[2] it was found that penicillin produced severe skin reactions. But most important was the observation that anaphylactic shock, with a fatality rate of about 9 per cent, was the most frequent serious reaction. Such severe reactions are almost always associated with parenteral administration.

The tetracyclines (e.g., TETREX) have the advantages of a broad range of antimicrobial activity and low toxicity. And in addition, the physician does not have to trouble himself or his patients with repeated blood studies when he prescribes TETREX. Minor reactions such as gastric upsets or mild skin rashes occur occasionally. The most serious side effects are staphylococcal and monilial overgrowth, but these are rare and can be adequately controlled.

Some Microorganisms Susceptible[a] to Tetracycline (TETREX)[b]

Streptococcus; Staphylococcus; Pneumococcus; Gonococcus; Meningococcus; *C. diphtheriae; B. anthracis; E. coli;* Proteus; *A. aerogenes; K. pneumoniae;* Shigella; Brucella; *P. tularensis; H. influenzae; T. pallidum;* Rickettsiae; Viruses of psittacosis and ornithosis, lymphogranuloma inguinale, primary atypical pneumonia; *E. histolytica; D. granulomatosis.*

[a] Some strains are not susceptible.

[b] Table adapted from Goodman, L. S., and Gilman, A.: The Pharmaceutical Basis of Therapeutics, 2nd edition, New York, The Macmillan Co., 1956, pp. 1322-1323.

High blood, body fluid, and tissue levels of active drug are quickly attained when the new phosphate preparation of tetracycline (TETREX) is used.

The semisynthetic tetracyclines have been in constant use since they were introduced in 1952. They have been proved clinically and have established themselves as safe, effective, and valuable antibiotic agents. But the final decision, the choice of agent, and the control of therapy must remain where it has always been, in the hands of the individual physician.

References: 1. Zinsser, H.: A Textbook of Bacteriology, 11th edition, New York, Appleton-Century-Crofts, 1957, p. 409. 2. Welch, H.: Lewis, C. H.; Weinstein, H. I., and Boeckman, B. B.: Severe reactions to antibiotics. A nationwide survey. Antibiotic Med. & Clin. Ther. 4:800 (December) 1957.

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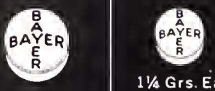

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Kuge, T.: Submitted for publication.

"In 86 percent of the patients there were excellent or good results. . . . Relief of pain was noted by the patients' statements, by the diminished need for analgesic drugs, and by improved sleep." (154 patients.)
Wein, A. B.: The Use of Carisoprodol in Orthopedic Surgery and Rehabilitation. Proceedings of the Symposium on The Pharmacology and Clinical Usefulness of Carisoprodol. Wayne State University Press, Detroit, 1959, p. 156.

In a double-blind study, SOMA was reported to be "clinically effective to a highly significant degree." (92 patients.)
Cooper, C. D., and Epstein, J. H.: The Clinical Evaluation of Carisoprodol by a double-blind technique. Ibid. p. 97.

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Literature and samples on request WALLACE LABORATORIES, New Brunswick, New Jersey

do it. Do you really think that the insurance companies are not attempting to provide better insurance policies that will help to do this job?

'Mr. Reuther: No, I don't say that. I say that the private insurance companies oppose the government doing anything in this field because they want to preempt this field. That is what I said. I don't think there is any question about it. The history of our efforts to get social legislation in the areas where insurance companies have an interest will demonstrate that they have opposed nearly every effort of the government to enter these areas or to improve these programs.

'Mr. Alger: That is your viewpoint. I simply must contradict it flatly. They are not opposing this particular program or compulsory health insurance by the federal government just because they don't want the government to do it, but because they reason that much better medical care can be provided by private and voluntary programs than by the government, and you have a different viewpoint.

'Mr. Reuther: They have had all these years to do it and they haven't done it. The government hasn't stopped them. Why haven't they met the needs on a private insurance basis or voluntary basis? They have had the field to themselves for years. Now, when the government moves in to fill the vacuum because of their failure they cry "Don't let the government do it. We will do it." Why haven't they done it? Can you tell me that?

'Mr. Alger: Why have not the private plans done it?

'Mr. Reuther: Yes.

'Mr. Alger: They are still evolving these, as for catastrophic illness. In fact, you are, as you said, helping to evolve them. You are a member of an association that is working on voluntary private plans, and you know it takes time even to figure actuarial risks.

'Mr. Reuther: You would say they have not had time?

'Mr. Alger: I did not say they have not had time. I said it takes time to work out these new insurance programs. If you don't like the present insurance programs why do you not help work them out?

'Mr. Reuther: We have been working hard in this field, but we recognize the limitations of a private insurance approach to this basic social problem. We do not believe that you can try to put the heavy cost of this basic need upon the retired worker at the point where his needs are the greatest and his income has been drastically reduced. This is exactly why we think a private insurance approach won't work.

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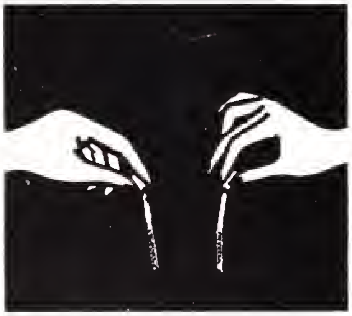

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'Mr. Alger: Let me point out to you, though, that you have said to us earlier that there are not accurate figures to determine the coverage of health insurance protection. . . . Does it not seem more worthwhile to you to wait until the White House Conference on the Aged and we should get these figures so we have something to go on?

'Mr. Reuther: We know the need is here now. You can talk with people who have the practical need. They will tell you you don't need a survey. Every time there is a problem instead of meeting it we say "Let's have another survey."

'We know enough about it now to know that the needs are not being met. Whether it is X per cent or Y per cent, we know it is serious and therefore we think we ought to have action now and not another study.

'Mr. Alger: I appreciate your view and I haven't convinced you of a thing, have I?

'Mr. Reuther: I think maybe that is mutual.' "

WOMAN'S AUXILIARY

(Continued from page 282)

Charles T. Shepherd, St. Louis County, will present a gold cup to the "Outstanding Auxiliary" in Missouri for this year. Mrs. Robert Mayer, chairman of the Points Committee, will present award certificates and money corsages to other high-ranking auxiliaries.

The installation of new officers will be conducted by Mrs. W. E. Martin, Odessa, a past state president. The gavel will then be presented to our most gracious and capable incoming president, Mrs. Jordan Kelling, Waverly, who will make her acceptance speech.

Other members assisting in our program by giving invocations and leading our pledge of loyalty will be Mrs. Frederick E. Wade, Kansas City; Mrs. J. N. Wakeman, Springfield; Mrs. F. C. Werner, Kansas City; Mrs. J. K. Ritterbusch, Fulton; Mrs. Warren Bowersox, St. Louis; Mrs. T. Reed Maxson, Warrensburg; Mrs. W. C. Cheek, Springfield; Mrs. F. F. Whitehead, Neosho; Mrs. G. K. Davault, Richmond; and Mrs. Willard Bartlett, St. Louis, founder of the Auxiliary in Missouri.

Much credit goes to Mrs. Harold H. Feller, St. Louis, chairman, and to Mrs. J. Martyn Schattyn, St. Louis County, vice-chairman, and to their many committees for the hours of planning and work they have already given and will be giving to make this Convention a pleasant and memorable occasion for all of us. Our sincere thanks to them!

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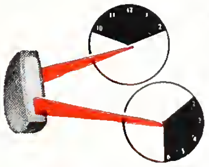

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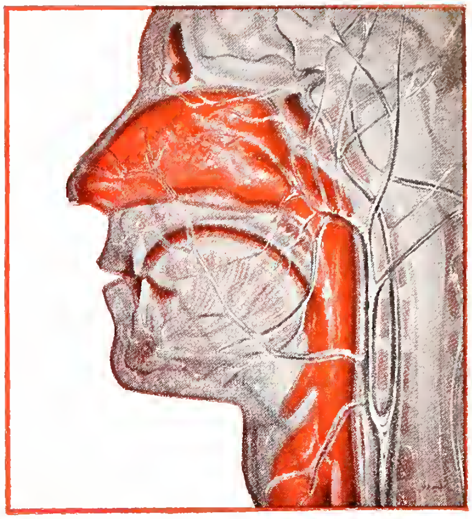

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Dosage (to be administered every 3 or 4 hours): *Adults* — 1 or 2 tsp.; *Children 6 to 12* — 1 tsp.; *Children 1 to 6* — ½ tsp.; *Children under 1* — ¼ tsp.

1. Fabricant, N. D.: E.E.N.T. Monthly *37*:460 (July) 1958.
2. Lhotka, F. M.: Illinois M. J.: *112*:259 (Dec.) 1957.
3. Farmer, D. F.: Clin. Med. *5*:1183 (Sept.) 1958.

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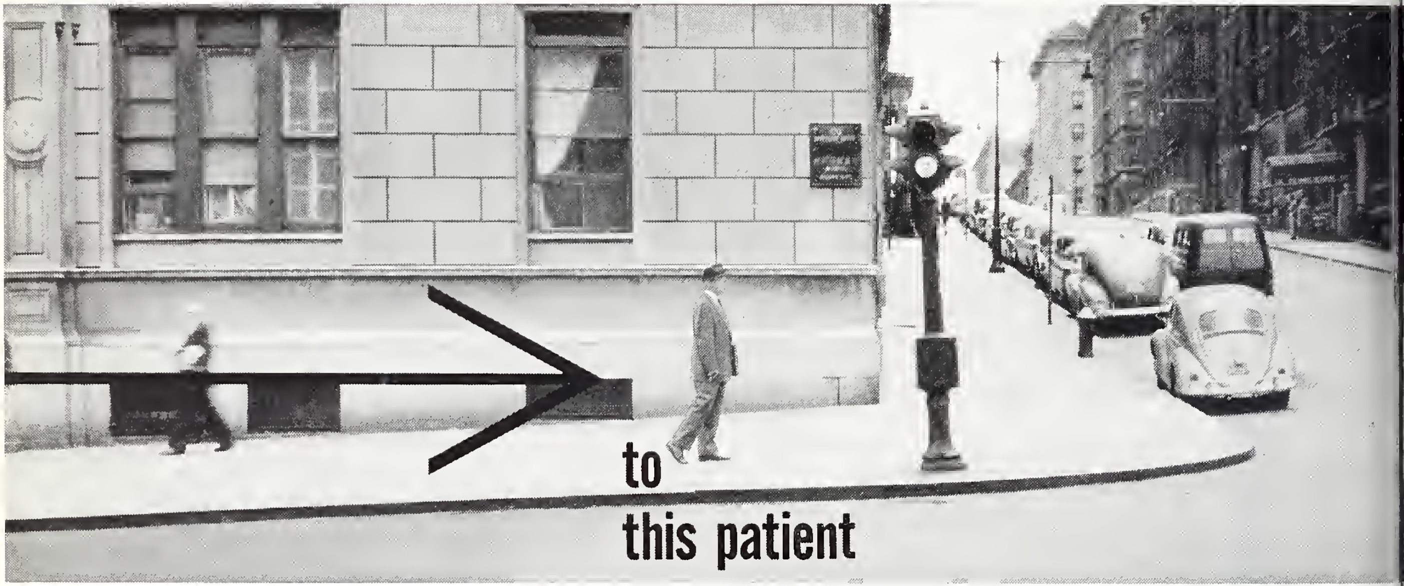
state of our knowledge be over-emphasized in the treatment of epilepsy. Emphasis is placed upon the fact that the main problem, which is that of curing the illness, is not solved despite the advanced awareness of our society about the malady. Another point which bears emphasizing is that having epilepsy does not prevent or immunize the patient from developing concurrently any other nervous disease. The epileptic, like any other normal person, can develop psychosis and neurosis, either separately or combined.

Part II of the book is devoted to the theory and proposed method of curing epilepsy. Here one can appreciate the fact that the author had no opportunity to revise or edit this material before his death. A large part of this section is taken up with his discussion about the theory of implantation of endocrine glands and a detailed description of technic employed. The actual studies involve only three patients, a donor and two recipients. Detailed case histories are presented on these three patients. The donor was a patient with serious Basedow's disease and the two recipients were both patients who were having frequent grand mal seizures in spite of all medication and in each case a great deal of mental deterioration had set in. The thyroid gland of the donor was operated on and a piece of freshly extirpated Basedow thyroid gland, the size of a walnut, was implanted into the divided lobe of the recipient's thyroid gland. The author reported that both recipients made a remarkable recovery and that there was a rapid subsidence of the symptoms of convulsive disorder. Long term follow-up studies could not be done but he reports that "one of the recipients showed marked improvement which lasted only a few months," and the other showed "marked improvement lasting through the time the report was written." It is the author's conclusion that "the course of events in the histories of these three cases seems to offer conclusive proof that



with intermittent claudication
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the over-activation of the thyroid gland may constitute a helpful therapy for idiopathic epilepsy."

The reviewer was left with a feeling of regret that Dr. Sakel was unable to pursue this study further than with these two cases. It was as if he were on the threshold of making another great discovery but time did not permit. The document is of intense historic interest as a great doctor's last contribution to medicine and medical literature.
R. S. T.

BOOKS RECEIVED

Orr's Operations of General Surgery, by George A. Higgins, M.D., Associate Professor of Surgery, University of Kansas School of Medicine; Lecturer in General Surgery and Surgical Technique, University of Kansas City School of Dentistry; Chief of Surgical Service, Veterans Administration Hospital, Kansas City, Missouri; and Thomas G. Orr, Jr., M.D., Associate in Surgery, University of Kansas School of Medicine; Surgeon, Veterans Administration Hospital, Kansas City, Missouri. Third Edition; with 1,990 Step-by-Step Illustrations on 835 Figures. W. B. Saunders Company, Philadelphia. 1958. Price $20.00.

The Surgeon and the Child, by Willis J. Potts, M.D., Surgeon in Chief, Children's Memorial Hospital; Professor of Pediatric Surgery, Northwestern University Medical School, Chicago. W. B. Saunders Company, Philadelphia and London, 1959. Price $7.50.

Emergency Treatment and Management, by Thos. Flint, Jr., M.D., Director, Division of Industrial Relations, Permanente Medical Group, Oakland and Richmond, California; Chief, Emergency Department, Permanente Medical Group, Kaiser Foundation Hospital,

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Richmond, California. Second Edition. W. B. Saunders Company, Philadelphia and London, 1958. Price $8.00.

RULES AND REGULATIONS

(Continued from page 304)

with the Board his intention to take the examination for license may, pending the period until he will be eligible to take such examination for a license be granted a permit to continue his residence and or clinical training in any state or city-supported mental or tuberculosis hospital. The qualifications of each such applicant shall be determined by the superintendent of the hospital in which he is to be employed and submitted to the Board, and the applicant may be interviewed by the Board. Such permit shall be issued for one year and may be renewed annually by motion of the Board upon recommendation of such superintendent. Application to transfer from one such hospital to another may be made to and determined by the Board. 2) That all applicants for state or city-supported mental or tuberculosis hospital be required to have a certificate from the Educational Council for Foreign Medical Graduates.

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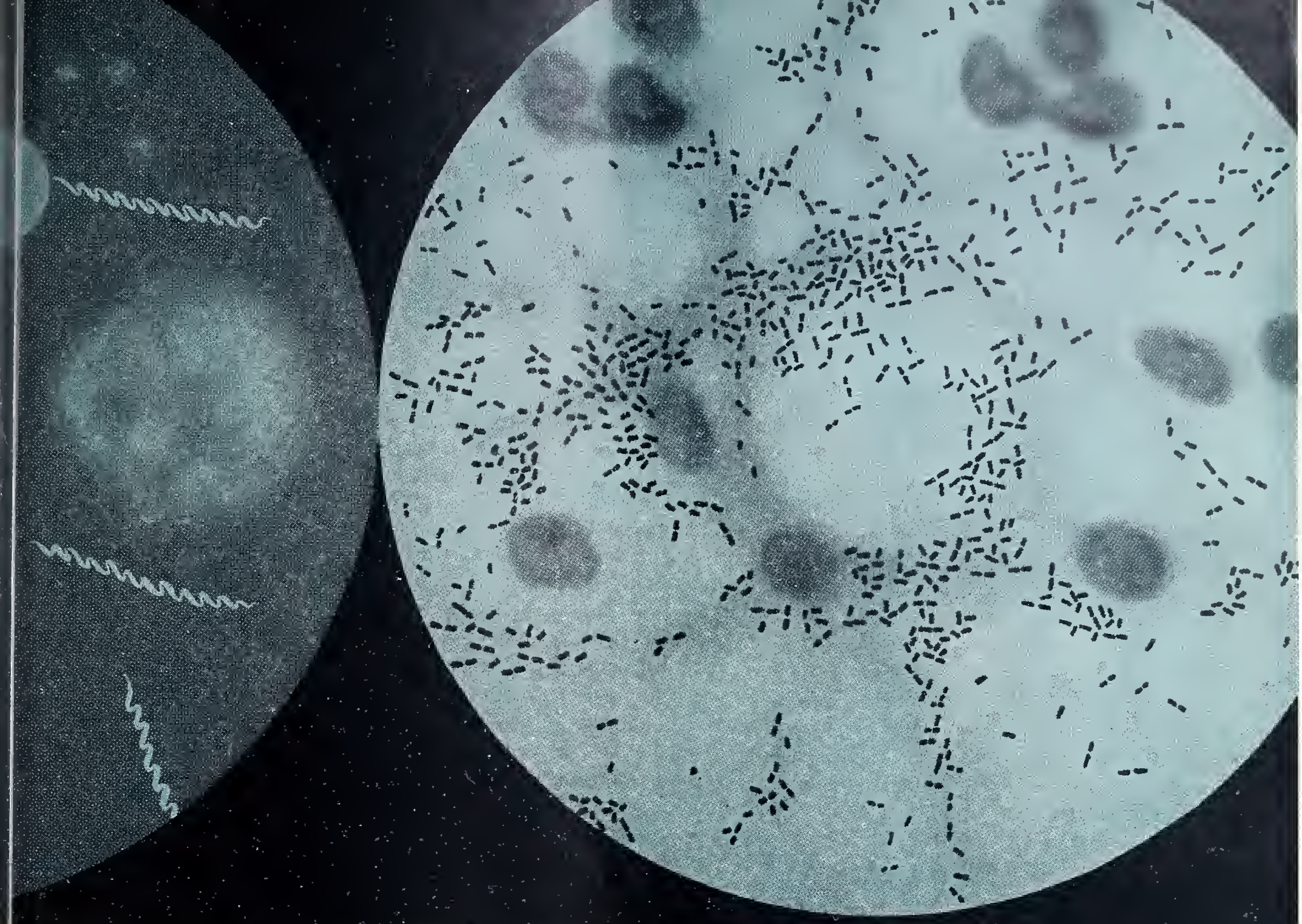

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ences: (1) Morton, J. J.: *Yale J. Biol. & Med.* **31**:397, 1959. (2) Rogers, D. E., & Louria, D. B.: *New England J. Med.* **261**:86, 1959. eming, B. H., Jr., & Flanigan, C., Jr., in Welch, H., & Marti-Ibañez, F.: Antibiotics Annual 1958-1959, New York, Medical Encyclo- , Inc., 1959, p. 414. (4) Edwards, T. S.: *Am. J. Ophth.* **48**:19, 1959. (5) Olarte, J., & de la Torre, J. A.: *Am. J. Trop. Med.* **18**:324, 1959. iter, L. S., & Ulrich, E. W.: *Antibiotics & Chemother.* **9**:38, 1959. (7) Holloway, W. J., & Scott, E. G.: *Delaware M. J.* **30**:175, 1958.

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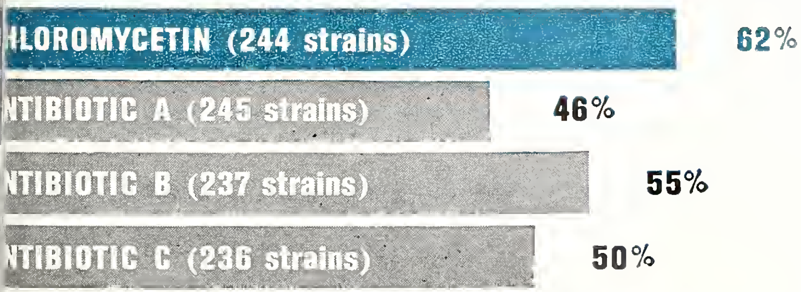

*Adapted from Leming & Flanigan.[3]

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in the Therapy of PNEUMONIA

Preferably, antibiotic therapy should be based on pretreatment culture of the offending pathogen, but in bacterial pneumonia the problem may well be too pressing to permit the required delay of 24 to 48 hours. A differential diagnosis among bacterial pneumonias, based on such clinical grounds as speed of onset, sepsis and pain may guide the choice of antibiotic for initiation of therapy.

Should clinical judgment dictate that antibiotic therapy be started immediately, at the same time a sputum sample or a subglottic swab can be sent to the laboratory for culture and sensitivity studies. If the response to the first antimicrobial agent proves unsatisfactory, a reasonable basis for changing therapy will then be at hand.

Choosing the Antibiotic

Since therapy must be started at once for bacterial pneumonia, it is advisable to choose a broad-spectrum antibiotic that quickly produces high levels of active agent (e.g., tetracycline phosphate complex, TETREX). Such an antibiotic probably has the best chance of controlling the pathogen, whether it be gram-negative or gram-positive. And if the laboratory report shows that the invading organism is much less sensitive to tetracycline than to other agents, the patient can then be changed to an appropriate antibiotic. If the difference in sensitivity is slight, then the possibility of side effects, sensitization, and toxicity should be evaluated before changing therapy to another antibiotic.

The greatest number of bacterial pneumonias are caused by pneumococci, which respond very well to penicillin, tetracycline, and chloramphenicol. Also, these antibiotics are usually effective against the other gram-positive coccal pneumonias. But penicillin is ineffective against the viral pneumonias and the gram-negative *Hemophilus influenzae* and *Klebsiella pneumoniae*. Although *K. pneumoniae* causes only about 1 to 2 per cent of pneumonia cases on the average,[1] these are apt to be acute and fulminating (Friedländer's pneumonia), with a high mortality rate if not effectively treated. Since pneumococcal pneumonia may be difficult to distinguish clinically from Friedländer's, except by gram-stained sputum smear, it may be wiser to start treatment with an agent also effective against Klebsiella.

Penicillin, however, in addition to having a limited spectrum, also causes many minor and some serious sensitivity reactions. In a recent survey[2] it was found that penicillin produced severe skin reaction. But most important was the observation that anaphylactic shock, with a fatality rate of about 9 per cent, was the most frequent serious reaction. Such severe reactions are almost always associated with parenteral administration.

Tetracycline is also clinically effective in primary atypical pneumonia.[3]

The tetracyclines (e.g., TETREX) have the advantage of a broad range of antimicrobial activity and low toxicity. And in addition, the physician does not have to trouble himself or his patients with repeated blood studies when he prescribes TETREX. Minor reactions such as gastric upsets or mild skin rashes occur occasionally. The most serious side effects are staphylococcal and monilial overgrowth, but these are rare and can be adequately controlled.

No one would deny that appropriate antibiotic therapy has greatly reduced morbidity and saved many lives of patients with bacterial pneumonia. Nevertheless, general supportive measures in the care of patients remain important even today. Especially in the desperately ill patient, antibiotics are not considered as substitutes for the individual evaluation, clinical observation and judgment of the physician.

Some Micro-organisms Susceptible[a] *to Tetracycline* (TETREX)[b]

Streptococcus; Staphylococcus; Pneumococcus; Gonococcus; Meningococcus; *C. diphtheriae; B. anthracis; E. coli;* Proteus; *A. aerogenes; Ps. aeruginosa; K. pneumoniae;* Shigella; Brucella; *P. tularensis; H. influenzae; T. pallidum;* Rickettsiae; Viruses of psittacosis and ornithosis, lymphogranuloma inguinale, primary atypical pneumonia; *E. histolytica; D. granulomatosis.*

[a] Some strains are not susceptible.

[b] Table adapted from Goodman, L. S., and Gilman, A.: The Pharmaceutical Basis of Therapeutics. 2nd edition, New York, The Macmillan Co., 1956, pp. 1322-1323.

References: 1. Wood, W. E., Jr.: In: A Textbook of Medicine. Edited by Cecil, R. L., and Loeb, R. F., 9th edition, Philadelphia, W. B. Saunders Co., 1955, p. 145. 2. Welch, H.; Lewis, C. H.; Weinstein, H. I., and Boeckman, B. B.: Severe reactions to antibiotics. A nationwide survey. Antibiotic Med. & Clin. Ther. 4:800 (Dec.) 1957. 3. Keefer, C. S.: The choice of an anti-infective agent. In: Drugs of Choice, 1958-1959. Edited by Walter Modell, St. Louis, The C. V. Mosby Co., 1958, p. 135.

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Curiosa et Trivia

WILLIAM B. McCUNNIFF

Wine merchant, M. Morel, of Rouen, was given over two pounds of mercury by mouth after four weeks obstipation in 1776. Failing a bowel movement, a Dr. Pillore suggested an operation. Over the violent objection of his colleagues, he performed the first recorded cecostomy. Postoperative course was uneventful until the patient died of peritonitis due to perforation of the jejunum where the mercury had lodged.

* * *

It may or may not prove anything, but *Who's Who in America* listed 2,070 M.D.'s (4.8 per cent of total listing) in 1950, as against 2,494 (5.9 per cent of total) in 1958.

* * *

Columbus reported that on his first voyage to the New World, a total span of 225 days, he suffered no ailment other than a "spell of sore eyes." This was presumed to be due to looking into the bright sun.

Capsule Clinics

- Monkey tests have shown that the live poliovirus vaccines currently being used in field trials are more neurovirulent than was found in the laboratories of the proponents of the vaccines. Melnick, J. L., et al., J.A.M.A. **171**:1165, 1959.

- Daily administration of 2 gm. griseofulvin to 14 normal men for three months did not produce significant changes in semen quality or in the histology of the testes. MacLeod, J., and Nelson, W. P., Proc. Soc. Exper. Biol. & Med. **102**:259, 1959.

- Chlorothiazide proved highly satisfactory in inducing diuresis in 10 patients suffering from the nephrotic syndrome associated with various types of renal disease. Burch, G. E., and White, H. A., Arch. Int. Med. **103**:369, 1959.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

Congress appears headed for a showdown this session in legislation for the federal government to provide medical care for aged persons.

The medical profession and allied groups stepped up their activities in opposition to such legislation as indications mounted that the issue was approaching a crucial stage. Several state medical societies planned to send delegations to Washington to personally express their opposition to their Congressmen.

Pressure behind such legislation began to build up early in February.

The Eisenhower administration announced that it was working on three possible programs for providing health care for aged persons in cases of catastrophic—lengthy and costly—illness.

Without amplification, President Eisenhower told a news conference that there was under consideration "a possible change" in the Social Security Act "to run up the taxes by a quarter of a per cent to . . . make greater provision for the care of the aged." The President's statement that "there has been no conclusion reached in the administration" was backed up by Arthur S. Flemming, Secretary of Health, Education and Welfare, in a clarifying announcement.

Flemming said that his department was working on two other approaches to what he called a serious problem in addition to the possible revision of the Social Security law mentioned by Mr. Eisenhower. The HEW Secretary said consideration also was given to (1) stepped-up federal assistance under the federal-state public assistance program, and (2) the federal government supplementing voluntary insurance programs.

Flemming again expressed opposition to the Forand bill which would increase Social Security taxes by one quarter of one per cent each on employers and employees to provide hospitalization, surgical benefits and nursing home care for Social Security beneficiaries. The Secretary said he wanted to "underline that the position of the administration is opposition to the Forand bill."

Flemming said he hoped to have an administration bill ready to submit in early April to the House Ways and Means Committee where the Forand bill is pending. The Committee is scheduled to take up in late March or early April proposed changes to the Social Security Act.

Proponents of the Forand bill—which is vigorously opposed by the American Medical Association and allied groups—were pointing their campaign toward securing the House Committee's approval of the legislation at that time.

The AFL-CIO, a main supporter of the Forand bill, urged labor union members to write to congressmen on the Committee urging them to vote for it. The AFL-CIO also distributed a pamphlet quoting a handful of physicians as supporting the legislation. But the labor organization did not mention that the overwhelming majority of doctors oppose it.

The Senate subcommittee on Problems of the Aged and Aging, headed by Sen. Pat McNamara (D., Mich.) issued on behalf of its Democratic majority a report stating that use of the Social Security program "is the most efficient procedure for providing" health care for older persons.

The AMA and the subcommittee's Republican minority sharply disagreed with the recommendation of the McNamara subcommittee regarding government medicine for Social Security beneficiaries.

Dr. Louis M. Orr, Orlando, Florida, President of the AMA said:

"This is a politically inspired committee. Senator McNamara, Democrat from Michigan, has long supported political medicine. The fact is that at the seven subcommittee hearings held throughout the United States, observers heard little support expressed by the older citizens who attended the hearings for government medicine financed by additional taxes and administered through Social Security."

The Republican minority stated that testimony before the subcommittee "proves that it is possible for elderly people to secure private insurance to provide hospitalization and surgical benefits without any intervention by public authorities.

Sen. John F. Kennedy (D., Mass.), a leading contender for the Democratic nomination for President, introduced legislation similar to the controversial Forand bill but broader in scope. The Kennedy bill would eliminate surgical benefits but would add diagnostic outpatient and home nursing services.

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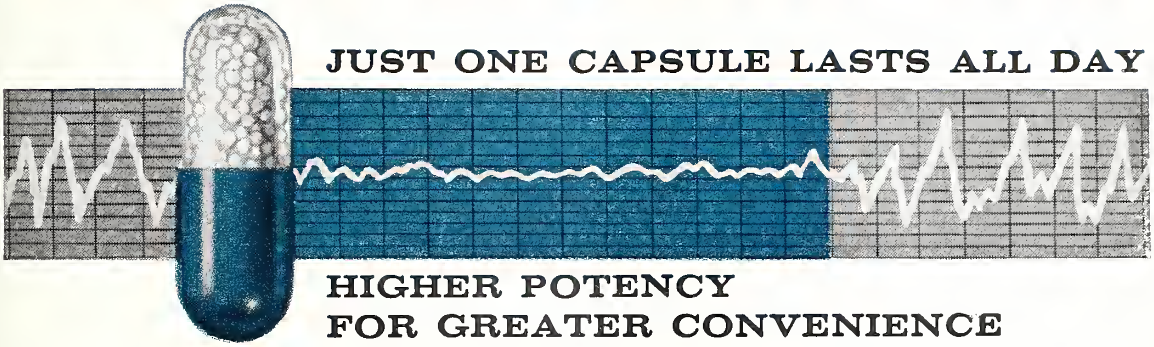

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Across Missouri

Health Careers was the subject of a recent survey made by the Missouri Council on Health Careers of professional personnel needs in the hospitals in the state. While the survey was limited to hospitals, it is probable that it reflects the need in doctor's offices, clinics and in industry.

The survey or study by the Missouri Council on Health Careers revealed that 1,618 specially trained professional workers—excluding physicians—are needed to fill existing needs in Missouri hospitals.

Occupational therapists and registered medical record librarians are in shortest supply in relation to demand, the study indicates. Most plentiful of the eleven personnel categories surveyed are non-registered laboratory technicians.

In terms of gross numbers, the registered nurse group has the biggest needs. There are an estimated 5,412 registered nurses in the state, but nearly a thousand more are required to meet present standards of patient care.

The Council reported that 8,839 full-time and 1,480 part-time professional persons are presently employed in Missouri hospitals. The study indicates that 85 per cent of professional staffing needs are now being met. A similar study, by the Missouri Hospital Association in 1955, revealed that only 81 per cent of staffing needs were being met at that time. A large increase in licensed practical nurses graduated from state training schools probably caused the upturn, the study concluded. In 1955, there were 1,425 licensed practical nurses in the state; in 1960 there are 2,229.

During the intervening four years, most other personnel groups remained stationary or showed increases in numbers. Only the medical and psychiatric social workers showed a small decrease in this period.

In actual percentage of needs of trained medical workers, the 1959 survey shows occupational therapists in greatest need, with only 57 per cent of the positions filled. Medical social workers number 67 per cent of the need. Physical therapists fill 70 per cent of the needs. Fifth are dieticians with 76 per cent. Laboratory technicians fill 82 per cent of the possible positions open. Registered nurses fill 85 per cent of the calls for this skilled work. Pharmacists are eighth in need, having 86 per cent of the positions possible. Practical nurses fill 87 per cent of the positions open. X-ray technicians are close to the need, 93 per cent.

The council, a nonprofit organization for promoting recruitment of professional personnel in the hospital and health industries, plans a companion study of schools in the state to determine whether they have adequate facilities to train increased numbers of students interested in jobs in the health and hospital fields.

Missouri Division of Employment Security

January marked an anniversary for the Missouri Division of Employment Security, its 21st. On January 2, 1939, the first payment, disbursed under the name "Unemployment Compensation," was made, the presentation of the check being made to the recipient by the Governor of the state.

During the 21 year period, some five-plus million benefit checks have been issued. These have amounted to more than $364 million. The report points out that "This growth of this system of social insurance, together with the $364,596,911 it has pumped into the Missouri community in times of need during the intervening 21 years, partly explains the reassuring economic fact that it is much more difficult to have a major depression today than it was in the dark 30's."

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Missouri Academy of General Practice

The third "Dollars and Sense" symposium of the St. Louis Academy, for sophomore, junior and senior medical students, and their wives of St. Louis and Washington University Medical Schools, was held Sunday afternoon, February 21, in the St. Louis Medical Society Auditorium. More than 200 students and wives attended. The program was developed by, and under the direction of, the Medical Economics Committee of the St. Louis Academy of General Practice, Dr. W. A. Mullarky, Chairman. The Missouri Academy and Mead Johnson Company were cosponsors with the St. Louis Academy.

The program began at 2:30 p.m. with Dr. Mullarky presenting the introductory remarks. Included in his talk were remarks setting forth the advantages and pleasures of general practice, sprinkled with a few words pointing up its unique responsibilities.

Wives served on a panel and gave their views.

Next, Mr. Ted Spyra of Mead Johnson Company presented a film strip discussion on "Where Shall I Practice." He touched upon numerous important factors to consider in selecting a practice location. "Look over a number of possible places before making a final decision," said Ted.

Mr. Paul Koenig, legal consultant for the St. Louis Academy, spoke about some of the legal aspects in starting a medical practice. Among these aspects he mentioned: malpractice insurance, contracts of partnerships and group practice, office leases, borrowing money, and wills.

Dr. Robert Keller, Wentzville, gave an interesting talk on rural practice. He told of his experience, following World War II, of practicing in St. Louis for some two years and then deciding to locate in a small rural Missouri town, approximately 100 miles from St. Louis. Here he found medical practice more to his liking. For personal reasons he stated that he located at Wentzville about two and one-half years ago and considers his practice now, not city or rural, but more suburban; enough rural, however, to furnish that real opportunity to know his patients and at the same time eliminate the hustle and bustle of the city.

More than 200 were in attendance.

Following Dr. Keller's talk, Mr. Spyra presented another strip film entitled, "Financing the New Practice." After learning how to finance a new practice it was time to point up a few specific practice locations in Missouri, so Ray McIntyre was requested to explain how the State Medical Association Physician Placement Bureau helps locate doctors. Ray displayed a suggested list of Missouri locations (58 places) with brief write-ups concerning each location. He said that many physicians contact his office each year seeking location information. This suggested list, in most cases, is brought to their attention. The list has been developed from requests from towns and communities for additional medical manpower. Also on the list are physicians seeking associates and medical groups wanting more doctors. Through his travels over the state Ray gathers much first hand information on physician locations that is continuously being added to the placement files.

Dr. Lois Wyatt, Kirkwood, spoke to the group

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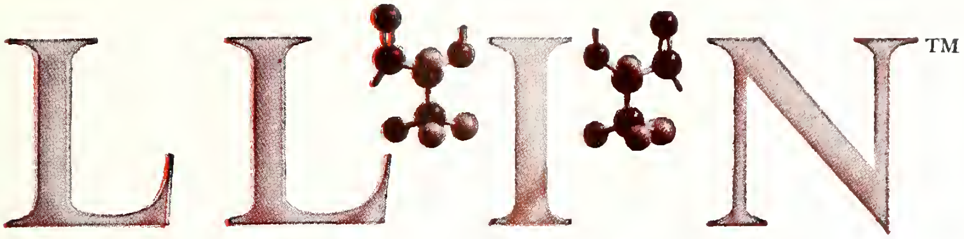

potassium phenethicillin (POTASSIUM PENICILLIN-152)

Relation of
intermittent
blood levels
YNCILLIN
ntibacterial
efficacy

SYNCILLIN, like all clinically available penicillins, is bactericidal. Periodic high blood concentrations may be sufficient to permit complete eradication of sensitive pathogens. According to Eagle,[6] "Soon after penicillin attains effective concentrations, the bacteria cease multiplying; and the bacteriostatic effect persists for a number of hours after penicillin has fallen to concentrations that are wholly ineffective. . . . The therapeutic significance of this postpenicillin recovery period is enhanced by the fact that the recovering bacteria, damaged but not killed by the previous exposure to penicillin, are abnormally susceptible to the host defenses. In consequence, the bactericidal process *in vivo* continues for many hours after the drug itself has fallen to ineffective concentrations."

luced rate of
inactivation
YNCILLIN
by staph
enicillinase

Bacterial resistance to penicillin has been attributed to the action of penicillin-inactivating enzymes produced by the invading organisms. SYNCILLIN is less affected by staphylococcal penicillinase than either of its component isomers. Further, SYNCILLIN is shown to be more slowly inactivated by this enzyme than penicillin V or penicillin G. Penicillinase from *B. cereus* likewise inactivates SYNCILLIN less rapidly than penicillin V or G.

Indications: SYNCILLIN is recommended in the treatment of infections caused by pneumococci, streptococci, gonococci, corynebacteria, and penicillin-sensitive staphylococci. In addition, SYNCILLIN is effective *in vitro* against certain strains of staphylococci resistant to other penicillins. SYNCILLIN, like other oral penicillins, is not recommended at the present time in deep-seated or chronic infections, subacute bacterial endocarditis, meningitis, or syphilis.

Dosage: 125 mg. or 250 mg. three times daily, depending on the severity of infection. Larger doses (e.g., 500 mg. t.i.d.) may be used for more severe infections. SYNCILLIN may be administered without regard to meals. Beta hemolytic streptococcal infections should be treated with SYNCILLIN for at least ten days.

Precautions: At the present time it is not possible to draw definite conclusions regarding the incidence of allergenicity to SYNCILLIN or its cross-allergenicity with natural penicillins. *Therefore, the usual precautions for oral penicillin therapy should always be observed.* Patients with histories of asthma, hay fever, urticaria, or previous reactions to penicillin should be watched with special care. Administration of oral penicillin, in rare instances, may provoke acute anaphylaxis, particularly in penicillin-sensitive individuals.

Diarrhea has been reported occasionally following heavy dosage. If this occurs, lengthen the interval between dosages.

If superinfection occurs during therapy, appropriate measures should be taken. Since some strains of staphylococci are resistant to SYNCILLIN as well as to other penicillins, cultures and sensitivity tests should be performed where indicated by clinical judgment. As is true with all antibiotics, clinical response does not always correlate with laboratory bacterial sensitivity reports.

Supply: 125 and 250 mg. tablets, bottles of 25 and 100. 125 mg. powder for oral solution, 60 ml. vials.

References: 1. Wright, W. W.: Microbiology Report to Bristol Laboratories Inc. 2. Morigi, E. M. E.; Wheatley, W. B., and Albright, H.: Paper presented at the Seventh Antibiotic Symposium, November 4-6, 1959, Washington, D.C. 3. Editorial: New England J. Med. **261**:305 (Aug. 6) 1959. 4. King, A.: Lancet **1**:651 (March 29) 1958. 5. Epstein, E.: J.A.M.A. **169**:1055 (March 7) 1959. 6. Eagle, H. and Musselman, A. D.: J. Bact. **58**:475, 1949.

BRISTOL LABORATORIES, Division of Bristol-Myers Company, SYRACUSE, NEW YORK

H. M. HARDWICKE, M.D.

Division of Health

IMMUNIZATION STATUS OF INFANTS AND PRESCHOOL CHILDREN IN MISSOURI

How well are infants and preschool children in Missouri protected against diphtheria, pertussis, poliomyelitis, smallpox and tetanus? This questions is of vital concern to practicing physicians and public health workers alike.

In order to obtain specific data relative to immunization levels of preschool children, the Division of Health has participated in immunization surveys in eleven rural counties in widely scattered areas of Missouri. The surveys have been carried out jointly by local public health workers, teachers, P.T.A.'s and others during 1959.

These surveys revealed many deficiencies in immunization among infants and preschool children.

Only about 30 per cent of the children had received basic diphtheria-pertussis-tetanus protection during the first year of life. Less than 50 per cent had received this protection before reaching age 4. Of the total number of children surveyed, considerably less than 50 per cent had received one or more booster doses of D.P.T. at age 6 or 7.

In regard to smallpox vaccination, the situation is even worse. Less than 10 per cent of the surveyed children were vaccinated under 1 year of age, 20 per cent under age 4. The number of revaccinated children was negligible.

Poliomyelitis vaccine has not been available long enough to permit measurement of immunization levels of infants and preschool children by the survey technic used. At ages 6 and 7, however, the per cent of surveyed children who had received three or more injections of poliomyelitis vaccine ranged from 54 per cent to 85 per cent in the eleven counties included in the surveys. Other studies of poliomyelitis vaccination coverage in Missouri and elsewhere indicate that preschool children are less well immunized than are children of school age.

These data indicate that a dangerous situation exists in Missouri. Remedial action is imperative. The seriousness of low immunization levels varies with the disease and may be summarized as follows:

Diphtheria.—Eleven cases and two deaths were reported in Missouri in 1959, most of which could have been prevented. Of more significance is the fact that there may be outbreaks at any time, such as have occurred recently in other states. A diphtheria epidemic would be a disgrace to practicing physicians and public health workers alike.

Pertussis.—The protective value of pertussis vaccine is less than that of diphtheria toxoid and the proportion of children that must be immunized in order to prevent epidemics is apparently higher. Evidence of this was demonstrated during the winter of 1958-59 when pertussis epidemics occurred throughout Missouri. The great need in pertussis prevention is adequate protection in early infancy and attention to reinforcing injections of vaccine during the preschool years. Half pertussis deaths in Missouri occur in infants less than 6 months of age.

Smallpox.—This is one of the most contagious of the communicable diseases. If this disease were to be introduced into Missouri it would probably spread like wildfire. Missourians are protected not so much by vaccination as by the fact that the disease has been successfully excluded from this country for several years. In this day of fast travel and a shrinking world, however, one is not safe from smallpox until it has been eradicated entirely. Until then, it is important that all infants be vaccinated before reaching age 1. Reactions to vaccination are less severe and less frequent at this age than in older persons.

Poliomyelitis.—Unlike diphtheria, it is apparent that poliomyelitis vaccination of a portion of a community affords no protection for the remainder of the community. Contrary to expectations, a steady decline in the occurrence of poliomyelitis has not accompanied the steady increase in the number of adequately immunized persons. In fact, the cyclic occurrence of the disease has continued as in the past. In Missouri and in the nation, the number of cases reported annually has increased each year since 1957, the most recent "low" year. This is a reversal of the downward trend from 1954 through 1957 which many hoped was a result of the increasing use of poliomyelitis vaccine. This recent increase in

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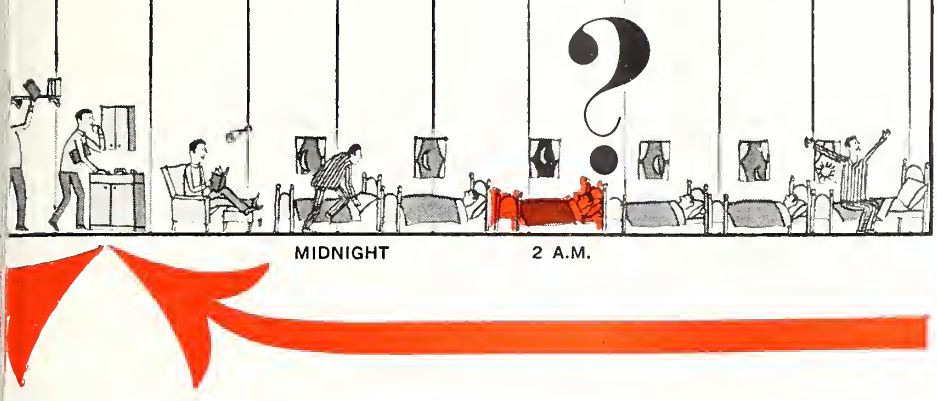
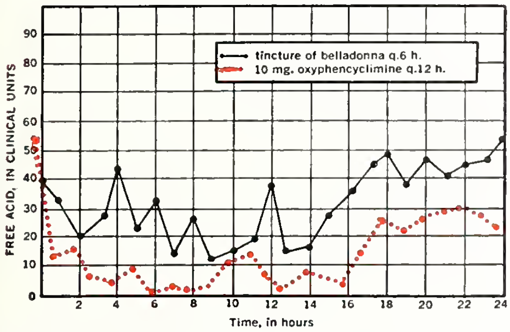
OVIDE CONTINUOUS CONTROL OF ACID SECRETION?



"Prolonged periods of achlorhydria" after 10 mg. oxyphencyclimine q. 12 h.[5]

MEAN GRAPH OF GASTRIC ACIDITY IN 4 PATIENTS RECEIVING COMPLETE THERAPEUTIC REGIMEN • 24-HOUR STUDY



Clinical Diagnosis: Peptic Ulcer—Gastritis—Gastroenteritis—Colitis—Functional Bowel Syndrome—Duodenitis—Hiatus Hernia (symptomatic)—Irritable Bowel Syndrome—Pylorospasm—Cardiospasm—Biliary Tract Dysfunctions—and Dysmenorrhea.

Clinical Results: Effective in over 92% of cases.

As for Safety: "Side reactions were uncommon, usually no more than dryness of the mouth...."[4]

Each ENARAX tablet contains:

Oxyphencyclimine HCl	10 mg.
Hydroxyzine (ATARAX®)	25 mg.

Dosage: One-half to one tablet twice daily—preferably in the morning and before retiring. The maintenance dose should be adjusted according to therapeutic response. Use with caution in patients with prostatic hypertrophy and with ophthalmological supervision only in glaucoma.

Supplied: In bottles of 60 black-and-white scored tablets.

References: 1. McHardy, G., et al.: J. Louisiana M. Soc. 111:290 (Aug.) 1959. 2. Steigmann, F.: Study conducted at Cook County Hospital, Chicago, Illinois, in press. 3. Kemp, J. A.: Antibiotic Med. & Clin. Therapy 6:534 (Sept.) 1959. 4. Leming, B. H., Jr.: Clin. Med. 6:423 (Mar.) 1959. 5. Data in Roerig Medical Department files.

New York 17, N. Y.
Division, Chas. Pfizer & Co., Inc.
Science for the World's Well-Being™

Woman's Auxiliary

"Select a large box and place in it as many cannon balls as it will hold; and it is, after a fashion, full; but it will hold more if smaller matters be found. Bring a quantity of marbles; very many of these may be packed in the spaces between the larger globes; the box is now full, but still only in a sense; it will contain more yet. There are interstices in abundance, into which you may shake a considerable quantity of small shot, and now the chest is filled beyond all question, but yet there is room. You cannot put in another shot or marble, much less another ball; but you will find that several pounds of sand will slide down between the larger materials, and, even then between the granules of sand, if you empty yonder jug there will be space for all the water, and for the same quantity several times repeated. Where there is no space for the great, there may be room for the little; where the little cannot enter, the less can make its way; and where the less is shut out, the least of all can find ample room."

Mrs. Jordan Kelling

—By C. H. Spurgeon

And so it goes with a year of Auxiliary work; it is filled with the great and the small. The conventions, board meetings, large public relations meetings, and benefit affairs given to raise funds for scholarships are the cannon balls to fill the box. The little matters like calling for a new Auxiliary member to take her to meetings, and making the new member feel that she is surrounded by friends when she attends meetings are small things, like the sand, but it helps to fill the box.

Perhaps your community is too small to support a Future Nurses' Club, but it is not too small for taking an active and important part in Recruitment by showing such excellent films as "Helping Hands for Julie," thereby opening a new door to the future for some of your local young people, and doing our doctors a great service by helping to supply them with the "helping hands" they badly need. If an effort is made to get such a film before the local P.T.A., the parents will also be helped in understanding so that they can help their children to make important decisions about their futures.

Helping one girl along by giving or lending money for nursing school tuition may not seem a great accomplishment to a small Auxiliary when she surveys the great accomplishments of the larger groups; but when this effort is multiplied by similar efforts all over the country, it amounts to the sponsoring of many future nurses.

In 1958-1959 approximately $2,700.00 was given to A.M.E.F. by county auxiliaries throughout the State of Missouri. This amount was the result of "cannon balls" and "marbles and sand." The goal of $2.00 per capita has been set by National this year, and it is our fond hope that we shall meet that quota. An increase of only 50 cents per capita would put us well over that mark.

Our theme for next year is "An Informed Membership in Action." Again, our accent will be on Community Service. Our state officers and chairmen of standing committees will be at your service and are anxious to supply you with information and help that you may request. We are all looking forward to a Happy New Year of action.

We have just finished a great year under the graceful, yet strong, leadership of Marjorie Peterson. We know we speak for all the state when we offer her our sincere gratitude and praise for her friendly encouragement and help to all, and for her efficient handling of not only the big problems that confront the president of our State Auxiliary, but also for her meticulous attention to all the trifles which, according to Michelangelo, "make perfection, but perfection itself is no trifle." Rest contented, Marjorie, knowing that you have done a huge task to perfection.

Everyone knowns the old story of the evangelist who came to town one stormy night to conduct revival services in a tent and found that there were only two men present and that they were sitting on the back row. But the evangelist, determined to do his best for the two who had put forth the effort to be there, poured his heart out for two hours, and when he finished went

(Continued on page 516)

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THOMAS W. BURNS, M.D., *and*
AKGUN SAYMAN, M.D., *Columbia*

Thyroid Disease in Missouri

Increasing frequency of thyroid disorders in patients admitted to the University of Missouri Medical Center caused this study to be made. The study encompasses the first three and a half years of operation of the Medical Center. Thyroid disease was diagnosed in 102 patients among 9,458 admissions and readmissions. Results of the study with conclusions are presented.

Dr. Burns is Associate Professor of Medicine and Dr. Sayman is Research Assistant in Cardiology (Medicine) at the University of Missouri School of Medicine, Columbia. This paper was presented in part before the Regional meeting of the American College of Physicians.

Interest in the epidemiology of thyroid disease in Missouri was aroused when patients with disorders of the thyroid appeared at the University of Missouri Medical Center with apparently increasing frequency. Curiosity and skepticism of the correctness of this impression prompted seeking out information relative to the incidence of thyroid disease in Missouri.

Methods and Materials

Incidence.—The present study encompasses the first three and one-half years of operation of the University of Missouri Medical Center, ending December 31, 1958. During this period, 13,826 patients were seen and 9,487 hospital admissions and readmissions occurred. Since a number of patients are readmitted one or more times, the number of individuals hospitalized during this period would be considerably less than 9,487. The major illnesses of hospitalized patients are listed and coded by the resident staff using the *Standard Nomenclature of Diseases and Operations,* 4th edition, as reference. Thus far, the illnesses of patients seen only in the out-patient department have not been coded.

Only recently have business machine punch cards been utilized by the Medical Record Library. Thus, the help of automatic sorting machines for case selection was not available for the present study. Most of the patients included were hospitalized on the medical service and were known to the authors. The Departments of Surgery and Pediatrics provided lists of likely patients cared for on their services. The medical record of any patient on whom a radioactive iodine uptake study, a basal metabolism or serum protein bound iodine had been performed was examined regardless of the result. The medical records of all likely patients were reviewed. Conventional clinical, laboratory and pathologic criteria were employed to select and group the cases with thyroid disease. In most instances the thyroid diagnosis made by the service caring for the patient was found acceptable. With few exceptions, it was the principal diagnosis.

Geographic Distribution.—In attempting to gain a realistic impression of the geographic

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From the Department of Medicine, University of Missouri School of Medicine, Columbia, Missouri; presented in part to the Regional Meeting of the American College of Physicians.

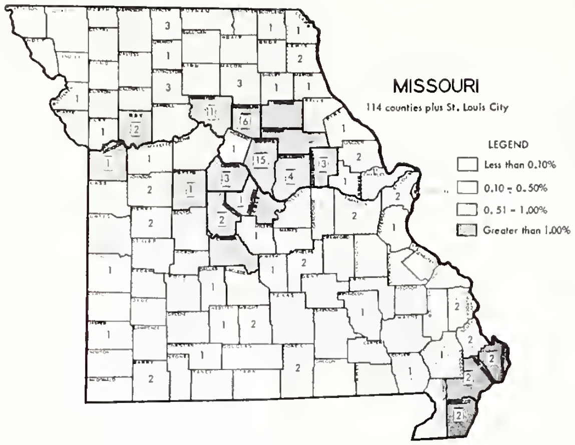

Fig. 1. Incidence of thyroid disease at the University of Missouri Medical Center from July 1956 to July 1958.

distribution of thyroid disease in Missouri, it was a help that, with few exceptions, patients seen at the University of Missouri are Missouri residents from the rural, or "out-state," portion or the state, the population of which tends to remain more static than that of the urban centers. Most of the patients seen at the Medical Center either were born in Missouri or in a state contiguous with Missouri. Many have lived all their lives in the same community. An estimate of the frequency of thyroid patients from a given area of the state has to be considered with a background indicating the frequency of all patients seen from that area. To provide such a background, the home counties of all admissions during a two year period were tabulated. This was a sample of over 6,000 admissions or about two-thirds of the total admissions for the three and one-half year period. This information provided the basis for the density shading of the county maps of Missouri (figs. 1 and 2). The legend at the side of the map permits one to relate the intensity of shading of a county to the percentage of the total that patients from that county constituted. The most heavily shaded counties provided 1.00 per cent or more of admissions; the least shaded counties, less than 0.10 per cent or fewer than six patients. Boone County, in which the University is located, as would be expected, provided the largest number of patients, 30 per cent of the total. All counties are represented, although one county by only one patient and several by two or three. It will be noted that most of the heavily shaded counties are close to Columbia. Exceptions, however, are counties in the "bootheel" region of the state. The least shaded counties are, by and large, lightly populated ones. An exception is Greene County.

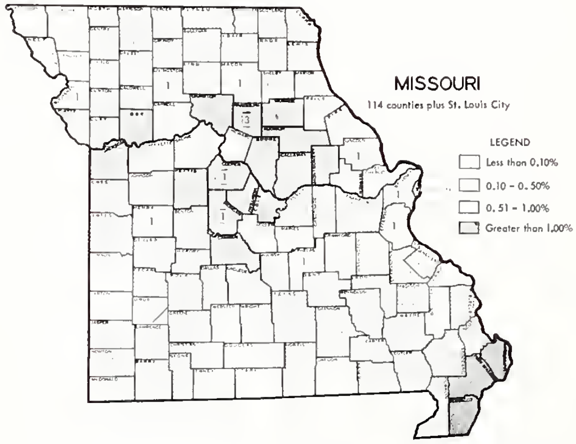

Fig. 2. Distribution of myxedema by county, 15 cases, at the University of Missouri Medical Center.

TABLE 1

FREQUENCY OF VARIOUS THYROID DISORDERS

Diagnosis	*Number of Patients*	*Per Cent Female*	*Incidence (Per Cent Admissions)*
Toxic diffuse	31	84	0.33
Toxic nodular	9	89	0.09
Non-toxic diffuse	9	100	0.09
Non-toxic nodular	19	90	0.20
Adenoma	8	100	0.08
Myxedema	15	80	0.16
Miscellaneous	11	73	....
Total	102	87	1.05

Survey of Other Missouri Hospitals.—To obtain information that might be useful in assessing our experience, a letter of inquiry was sent to nine Missouri hospitals. Yearly admission rate figures since 1945 and the number of times thyroid disease was diagnosed in corresponding years was requested.*

Results

Incidence.—Among the first 9,487 admissions, 102 patients were found to have thyroid disorders, an incidence of 1.05 per cent. This figure is an estimate and is lower than the actual incidence for two reasons: first, the admissions figures are not corrected for readmissions; and, secondly, since all medical records were not examined, there is the possibility that cases of thyroid disease were overlooked. Five such cases have come to our attention and are not included here. In table 1, the cases selected are categorized into seven groups. The titles of these groups are the diagnoses to be found in the *Standard Nomenclature of Diseases and Operations*, 4th edition. The marked preponderance of females in all categories of thyroid disease was striking.

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* We are grateful to the doctors and hospital officials who cooperated in this survey.

In table 2 are listed the categories presenting with hyperthyroidism. Toxic diffuse goiter was about three and one-half times as frequent as toxic nodular goiter. In table 3 are listed the principal categories of nontoxic goiter. The mean age of the patients concerned is indicated and the age range noted in parentheses. The diffuse group with an average age of 42 were considerably younger than the nodular one, average age of 60, a finding consistent with the view that these are not really different entities, but rather a single one being observed in patients of varying age. The miscellaneous group was comprised of a scattering of patients representing six of the less common disorders of the thyroid. These are listed in table 4. Carcinoma appeared unduly common, but with a larger sample size this may not hold true. The number of patients with thyroiditis of one kind or another is suspiciously low. In our review of the records, this diagnosis was suggested by the data in several instances but insufficient information was obtained to permit a definite conclusion.

TABLE 2

HYPERTHYROIDISM

	Number of Patients	*Per Cent*
Toxic diffuse goiter	31	74
Toxic nodular goiter	9	21
Hyperactive adenoma	1	2.5
Hyperthyroidism without goiter	1	2.5
Total	42	

TABLE 3

GOITER WITHOUT HYPERTHYROIDISM

	Number of Patients	*Mean Age*
Nodular	19	60 (33-75)
Adenoma	8	49 (24-60)
Diffuse	9	42 (22-57)
Total	36	

TABLE 4

MISCELLANEOUS THYROID DISORDERS

Carcinoma of thyroid	3
Chronic thyroiditis	1
Non-suppurative acute thyroiditis	2
Cretinism	3
Hyperactive adenoma	1
Hyperthyroidism without goiter	1
Total	11

Geographic Distribution.—The county of origin of patients with thyroid disease that we have seen is indicated on the state map contained in figure 1. Figure 2 demonstrates the distribution of myxedema; these patients have tended to be in the central part of the state. Randolph County provided three of the fifteen cases. No cases from the "bootheel" counties were found. In figure 3 the distribution of diffuse toxic goiter is represented. Cases are scattered and, in general, are proportional to the background density. The "bootheel" provided its expected share of cases. One might infer that toxic patients have the vitality to make the long trip to Columbia while their myxedematous neighbors do not. There was nothing distinctive about the distribution of other toxic goiters or nontoxic goiters.

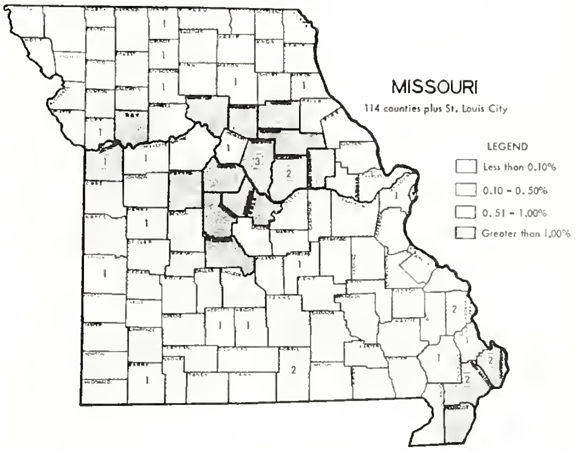

Fig. 3. Distribution of toxic diffuse goiter (Grave's disease) by county among patients at the University of Missouri Medical Center.

Survey of Other Missouri Hospitals.—Of nine hospitals polled, replies were received from six. The information obtained is tabulated in table 5.

Discussion

Information regarding the incidence of thyroid disease in general or of a particular thyroid disorder, such as myxedema or toxic goiter, is difficult to obtain. In the past, concern over endemic goiter has prompted numerous surveys in various parts of the world. This type of study, however, has become rare indeed in the United States since the advent of iodized salt about 35 years ago. Thyroid disease as such is not a reportable disease. Death certificate information obtained from the Bureau of Vital Statistics of the Missouri State Division of Health,* indicates about 20 deaths a year are attributed to toxic

TABLE 5

INCIDENCE OF THYROID DISEASE AMONG ADMISSIONS TO SEVEN MISSOURI HOSPITALS

Hospital	*Periods Reported*	*Admissions*	*Thyroid Disease Diagnosed*	*Incidence (Per Cent Admissions)*
St. Louis City	1945-46	17,365	15	0.09
	1946-47	18,986	69	0.36
	1947-48	18,762	57	0.30
	1948-49	18,541	47	0.25
	1949-50	17,965	49	0.27
	1950-51	16,003	73	0.46
	1951-52	15,899	64	0.40
	1952-53	16,042	81	0.50
	1953-54	15,171	87	0.57
	1954-55	14,460	70	0.48
	1955-56	16,651	100	0.60
	1956-57	18,097	132	0.73
	1957-58	19,277	161	0.84
St. John's Hospital, Springfield	1949-55	41,096	756	1.84
	1955-58	41,585	641	1.54
St. John's Hospital, Joplin	1955-57		28	
Barnes Hospital	1951	22,342	448	2.01
	1952	22,914	441	1.92
	1953	23,707	512	2.16
	1954	25,187	458	1.82
	1955	26,586	554	2.08
	1956	28,103	552	1.96
	1957	27,242	530	1.95
St. Joseph's Hospital	1940	3,057	19	0.62
	1941	3,093	20	0.65
	1942	3,022	17	0.56
	1943	3,060	39	1.20
	1944	3,650	25	0.69
	1946	3,867	23	0.60
	1947	4,677	33	0.71
	1948	5,169	39	0.75
	1954	6,172	29	0.47
	1955	6,152	35	0.57
	1956	6,074	43	0.71
	1957	6,633	20	0.30
	1958	6,636	22	0.33
Missouri Methodist Hospital	1944-54	87,021	849	0.98
	1955-58	38,817	359	0.92
University of Missouri Hospital	1955-58	9,487	102	1.05

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* Through the courtesy of Dr. Henry Belden.

goiter and about five deaths to myxedema. It would seem unwise to infer the incidence of thyroid disease from such figures or even those that may be obtained from a large series of autopsied cases. Short of a house to house type of survey such as has been used in studying endemic goiter, the incidence of thyroid disease among general hospital admissions is probably the best available index as to the prevalence of thyroid disease among the population in general.

Our incidence figure of 1.05 per cent is comparable to those reported by other Missouri hospitals. In the 1955-58 period, the range was from 0.3 per cent (St. Joseph) to 2.0 per cent (Barnes). In those hospitals reporting earlier years, there appeared to be no definite trend in incidence with the exception of the St. Louis City Hospital where a consistent increase occurred (see table 5). In comparing figures among several institutions, one is limited by the lack of uniformity in the criteria used for including a diagnosis of thyroid disease when it is not the principal diagnosis.

TABLE 6

INCIDENCE OF MYXEDEMA, GENERAL HOSPITAL ADMISSIONS*

	Per Cent
Massachusetts General, Boston (1935)	0.08
University of California, San Francisco (1934)	0.04
Charity, New Orleans (1933)	0.01
Minneapolis General, Minneapolis (1931)	0.06
Mayo Clinic, Rochester (1935)	0.07
University of Missouri Medical Center	0.15

* From Means, 1948.

We did not request cooperating hospitals to furnish information regarding specific diagnoses. Considering our small sample size, it would seem wise to refrain from much speculation concerning the relative incidence of the various categories of thyroid disease. An exception is the myxedema group which represented 15 per cent of the total number of cases. Incidence figures for this illness from other hospitals in various parts of the country are contained in table 6.

During the last decade a tremendous amount of information has been forthcoming regarding the physiology of the thyroid gland. Yet the nature of the major disorders of the thyroid remain obscure. It would be unwise to ignore any clue in pursuing this problem; and these clues may come from the epidemiologist as well as from the biochemist. The information available regarding the relation of iodine deficiency to "endemic" goiter and of the relationship of endemic goiter to other thyroid disease is not entirely satisfactory (Greenwald, 1950). No thorough study of the geographic distribution of thyroid disease has been undertaken in the United States to see if "goiter belts" still exist since the variable of iodine deficiency has been removed. Perhaps the most dramatic clue afforded by incidence figures is the striking disproportion in the sex ratio noted in thyroid diseases. When one notes that from 80 to 90 per cent of patients with myxedema, Hashimoto's struma and Grave's disease are women, the possibility that these diseases are somehow related in their pathogenesis cannot be avoided.

SUMMARY

1. During the period of July 1955 to December 1958, thyroid disease was diagnosed in 102 patients among 9,487 admissions to the University of Missouri Medical Center. A comparable incidence was reported by several other Missouri hospitals surveyed. No attempt was made to compare the gross incidence figure with institutions outside of Missouri.

2. In all major categories of thyroid disease the preponderance of females was striking. The incidence of myxedema was high in comparison with figures from other institutions and in relationship to the frequency of other types of thyroid disorder at our institution.

3. No predilection of any category of thyroid disease for a particular region in the State of Missouri was noted.

4. The possibility of gaining worthwhile clues to the basic causes of thyroid diseases through epidemiologic studies deserves emphasis.

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Response to Anesthesia and Surgery After Adrenal Cortical Hormone Therapy

Atrophy and suppression of the adrenal cortex occurs as a consequence of adrenal cortical hormone therapy. The acute adrenal insufficiency which becomes manifest during periods of stress, particularly anesthesia and surgery, is the prime subject of this paper. The common side effects of steroid therapy such as increasing the severity of diabetes, reactivation of old tuberculous lesions, peptic ulcer progression, delayed wound healing and inadequate response to infection have been well publicized.

Four cases of postoperative death from adrenal cortical insufficiency in patients who had received prolonged cortisone therapy before operation had been reported by 1954.[1, 2, 3] All four patients were found to have atrophy of the adrenal cortex at necropsy. The atrophy is due to suppression of pituitary secretion of ACTH by high blood levels of exogenous adrenal hormones. All the synthetic analogues of hydrocortisone and cortisone currently available have the same effect on the pituitary. The following eight questions will be discussed:

(1) What is the basis for complications during anesthesia and surgery in a patient who has received corticoids? (2) What dose of corticoid administered over what period of time is necessary to produce adrenal cortical suppression? (3) How soon after stopping corticoid therapy is it safe to produce anesthesia and perform a surgical procedure? (4) How may the extent of adrenal cortical suppression be determined before anesthesia and surgery? (5) How may a patient who has recently received significant corticoid therapy be prepared for anesthesia and surgery? (6) How should the anesthesia be conducted? (7) What post-anesthesia and postoperative care is necessary? (8) What other disease states are characterized by adrenal cortical insufficiency?

Cortisone therapy decreases the production of corticotropin or ACTH by the pituitary gland, thus allowing adrenal atrophy. The adrenal gland suppressed or atrophic from decreased ACTH is not able to respond during stress, thus adrenal insufficiency occurs.

Stress of any sort increases the production of mineralocorticoids and glucocorticoids by the adrenal glands. The glucocorticoids are necessary for water and electrolyte maintenance and carbohydrate metabolism as well as vasomotor tone. Vasomotor tone is of utmost importance in surgery and anesthesia. In adrenalectomized animals normal sympathetic activity is present but the smooth muscle in the arteriolar walls appears to be unable to respond to sympathetic nerve impulses or norepinephrine, thus allowing hypotension. Normal response to norepinephrine can be restored by application of adrenal cortical extracts demonstrating that the failure of the adrenals to respond to stress by producing cortisone results in the state of "adrenal shock" characterized by hypotension. Adrenal hypofunction may also be the result of destruction of the gland by tuberculosis, neoplasm or surgical excision.

Gillies[4] found in his series that 5.6 per cent of patients coming to surgery had received cortisone. He reported two cases of hypotension during surgery. Both patients responded promptly to the administration of 100 mg. of cortisone intravenously.

In a series by Lefemine[5] patients who underwent surgery were studied preoperatively and postoperatively to determine the degree of increased adrenal activity due to the stress of sur-

The common side effects of steroid therapy are mentioned but the acute adrenal insufficiency which becomes manifest during periods of stress, particularly anesthesia and surgery, is discussed in the patient who has atrophy and suppression of the adrenal cortex as a consequence of adrenal hormone therapy.

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gery. All were premedicated in the same manner. Blood samples were taken before surgery and 2, 12, 24 and 48 hours postoperatively and the 17-hydroxycorticosteroids were measured. Twenty-four urine samples were taken on the day of surgery and daily for up to one week postoperatively for 17-hydroxycorticosteroid determinations.

The usual response to a major surgical procedure was a prompt elevation in plasma 17-hydroxycorticosteroids, with a peak level within the first 12 hours postoperatively. Following the peak rise a more or less abrupt descent occurred within from 36 to 48 hours. Malnutrition and anemia caused delayed peak rises. Patients with impaired liver function showed higher peak levels.

He concluded that pain, shock, psychic tension, drugs and anesthesia all affect plasma levels of cortical hormones and that all are important in evaluating adrenal cortical response to operation and anesthesia. Zweifach[7] showed that the adrenal cortex is essential for maintenance and function of the terminal vascular bed.

The adrenal cortex has been described by Selye[6] as the central organ of the stress reaction. He included three pathologic findings: (1) adrenal cortical enlargement with signs of hyperactivity which included hypertension, (2) thymolymphatic involution and (3) gastrointestinal ulcers as part of this stress reaction.

The mechanism causing ACTH excretion according to Hume[8] includes (1) non stress situations and involves stimulation of the pituitary by a decrease in blood steroids, (2) moderate trauma stimulates release of ACTH without regard to steroid levels, and (3) severe trauma with marked increases in ACTH and corticosteroid levels. All three apparently work through one or several neurosecretory centers in the ventral hypothalamus to stimulate the pituitary. According to Hayes[9] hemodynamic failure from any cause may produce hypoadrenocorticoidism secondary to decreased blood flow to the adrenal glands.

Any amount may suppress the production of ACTH sufficiently to cause adrenal hypofunction. Theoretically an amount equal to the daily requirement of cortisone, that is 20 mg. per day, might be enough to cause adrenal suppression in some patients while larger doses would be required on others. Atrophy most commonly occurs after doses of more than 20 mg. per day.

Any patient who has received cortisone for from 6 to 12 months prior to surgery should be treated as if he has adrenal cortical suppression. Pender[4] prepares all patients who have shown signs of hypercortisonism such as rounding of face, hirsutism, hypertension, peripheral edema or dorsal fat pad hypertrophy unless the patient has had no cortisone for 12 months or longer. He feels that once a patient has shown signs of hypercortisonism they are subject to adrenal cortical suppression for a longer period after the drug has been discontinued.

How may the extent of adrenal suppression be determined before surgery?—Many tests have been used to measure certain adrenal cortical functions. No test known can determine the amount of stress each patient can withstand or quantitate the ability of the adrenals to react to stress. If such a test existed it would still be necessary to know the stressfulness of each surgical procedure.

The degree of adrenal suppression may be more related to duration of therapy than dosage of cortisone administered. Adrenal function may be tested by administration of ACTH and determination of the fall in eosinophils. Although a normal response may be obtained, after the stress of anesthesia and surgery, shock may occur. The Mayo Clinic group advocates special preoperative preparation for any patient who had received steroid therapy at any time. One must conclude that there is no satisfactory test to determine the degree of adrenal suppression.

What preoperative preparation should be carried out in patients who have received significant cortisone therapy?—The method of preoperative preparation used by Pender[4] is 20 mg. of cortisone intramuscularly 48, 24 and one or two hours preoperatively to form a depot of cortical hormones for absorption during and after operation. Bayliss[3] gives from 100 to 200 mg. cortisone acetate 24 and four hours preoperatively intramuscularly and 100 to 150 mg. at the end of the operation. Gillies[2] gave 40 mg. of cortisone in each of four sites at 6:00 p.m. on the day before surgery, then 50 mg. of cortisone in each of two sites just before premedication on the day of surgery. During the operation he adds 100 mg. cortisone to each 500 cc. of fluids or blood administered and at the end of the procedure 100 mg. are given intramuscularly.

How should the anesthesia be conducted?—In general hypnotic and anesthetic drugs produce an exaggerated effect in patients who have been receiving cortisone therapy and should be given in reduced dosages and with caution. Morphine or its derivatives may profoundly affect patients who have adrenal insufficiency. The premedication should be about one-half that prescribed for normal patients of the same age and weight.

Schwartz[1] and associates reviewed 23 anesthetic procedures carried out on 19 patients who had Addison's disease. They could demonstrate little relationship between anesthetic agent used and the complications that arose. The agents used were ether, cyclopropane, thiopental sodium and local anesthetic agents. Hypotension occurred with approximately the same frequency regardless of the agent used. However, Brewster[10] has demonstrated that ether is an especially dangerous agent in adrenal cortical insufficiency. Ether ordinarily markedly stimulates the release of the adrenal hormones, and in deficiency states is profoundly depressing.

The method of anesthesia recommended by Patrick[11] for patients with adrenal suppression is ether and O_2 inhalation or a combination of pentothal N_a and curare intravenously with N_2O+O_2 by inhalation. Endotracheal intubation is done routinely by him.

It is felt by most authors that six 100 mg. ampules of hydrocortisone should be in the operating room at all times when surgery is being performed on patients who have received cortisone preoperatively. Patients who have received cortisone preoperatively stand blood loss poorly and special care must be taken to replace blood as it is lost.

What postanesthesia and postoperative care is necessary?—In the immediate postoperative periods patients who received preoperative cortisone require close observation. Hourly blood pressure and pulse rate determination should be made for 24 hours. Analgesia and sedation should be minimal. If hypotension develops 100 mg. of Hydrocortisone intravenously should be given, together with 200 mg. cortisone intramuscularly. Patients who received cortisone before surgery and who were prepared by cortisone preoperatively should be given the following schedule according to Gillies:[2]

Day	*Cortisone*	*ACTH*
1	50 mg.	15 mg.
2	40 mg.	15 mg.
3	30 mg.	15 mg.
4	20 mg.	15 mg.
5	10 mg.	15 mg.
6	0 mg.	0 mg.

What other disease states are characterized by adrenal cortical insufficiency?—In bilateral adrenalectomy the patient should be prepared as if he had adrenal insufficiency. Patients with Addison's disease who undergo surgery should be prepared with cortisone and maintained on schedules similar to those mentioned previously. Simmond's and Sheehan's diseases, in which the absence of ACTH allows adrenal atrophy, cause a response to stress similar to the states mentioned previously. Repeated surgical procedures at short intervals may cause adrenal exhaustion and insufficiency.

SUMMARY

Cortisone decreases ACTH production causing atrophy of adrenal glands which may thus not be able to respond to stress. The preparation of patients who have received cortisone is described. Postoperative continuation of cortisone may be life saving as many cases of irreversible shock have occurred in these patients.

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Leptospirosis in Missouri

While the primary hosts of Leptospira icterohemorrhagiae, Leptospira pomona and Leptospira canicola are rats, cattle, swine and dogs, there is an increasing incidence in man. The situation in Missouri is discussed.

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THE ETIOLOGIC agents of leptospirosis are long, slender (10μ x 0.1μ), aerobic spirochetes which, unlike the other pathogenic genera of spirochetes *(Treponema* and *Borrelia),* are readily cultivated and studied in the laboratory. Leptospirosis is not a single disease but a group of diseases caused by a variety of leptospiral serotypes. To date the most important serotypes in this country have been *Leptospira icterohemorrhagiae, Leptospira pomona,* and *Leptospira canicola,* whose primary hosts are respectively rats, cattle, swine and dogs. Human infections with other serotypes such as *L. autumnalis, L. grippotyphosa, L. bataviae* and *L. ballum* have been reported but are sporadic and have yet to be reported in Missouri.

Leptospiral infections are zoonoses, diseases transmitted from animal to man. Although rats, cattle, swine and dogs are the primary animal carriers of the leptospiral organisms that most often infect man, sheep, horses, goats, deer and a variety of wild animals including skunks, raccoons, foxes, bats and wildcats have been found to be infected with leptospiral organisms, infectious to man.

Most human infections follow direct or indirect contact with infected urine from animal reservoirs. Direct contact may occur from handling sick animals or from contact with infected carcasses. Indirect contact may occur from accidental or purposeful immersion in water containing infected urine from any host. Leptospira usually enter the body through the mucous membranes of the conjunctiva, nose, mouth and throat or through abrasions of the skin. Infection through the intact skin is doubtful and it is unlikely that the digestive tract is an important portal of entry since the pH of the stomach is usually such that the leptospiral organisms would be quickly destroyed.[1]

During the last decade infections caused by these organisms have been receiving increased attention from both the medical and veterinary professions of the United States. From 1905 to 1948 there were two reported human cases of leptospirosis in Missouri.[2] In the period 1954 to 1959 there have been ten additional human cases reported in Missouri and confirmed by positive serologic tests performed by the Missouri Division of Health. There was one febrile episode caused by *Leptospira pomona* in a swineherder and three cases of infection by *Leptospira pomona* occurring in farmers exposed to an infected herd of cattle. The remaining six cases were sporadic cases with an age span from 1 year to 79 years of age. Thus in the last five years in Missouri more cases of human leptospirosis have been reported than in the last four decades.

In man the clinical syndromes produced by various leptospiral organisms range from benign febrile episodes that often pass undiagnosed, to a more severe febrile meningitis,[3] recurrent isolated uveitis,[4] and the classical Weil's disease manifested by chills, fever, conjunctival injection, diffuse hemorrhagic phenomena, muscle tenderness, jaundice with signs of increasingly severe hepatic and renal failure.[5] The most common form of leptospirosis, the febrile episode that often passes undiagnosed, has been carefully studied and reported by Stockard and Woodward.[6] These acute febrile episodes usually last about eight days with a convalescent period of approximately two weeks. The onset is abrupt, marked by rigor, fever, malaise, anorexia, headache, myalgia and retro-orbital pain. Nausea, vomiting and diarrhea are quite frequent. Cough both dry and productive associated with hemoptysis occurs occasionally. Less common syndromes caused by the *Leptospira* are arthritis, myocarditis,[7] hemorrhagic pneumonitis,[8] and miliary pneumonia.[9] Neurologic complications such as subarachnoid hemorrhage, palatal, facial and oculomotor nerve paralysis, brachial and sciatic neuritis, transverse myelitis, and paralytic bulbar paralysis have been reported.[10]

Most information on the incidence of leptospirosis has been acquired by serologic surveys followed, when possible, by isolation and identification of the organisms. These surveys have been carried out in humans by sampling special occupational groups such as veterinarians, abattoir workers and farmers, and comparing the results with randomly selected sera.

Following increased interest in Missouri and support of the United States Public Health Service, a wide scale serologic survey is underway utilizing the cooperative efforts of the Schools of Medicine and Veterinary Medicine of the University of Missouri and the Missouri Division of Health. The Missouri study has sampled a variety of human and animal sera with a leptospira microscopic agglutination test. Some of the findings follow: Of 276 random human samples 8 or 2.9 per cent are positive for leptospiral antibodies. Table 1 illustrates the leptospiral serotype agglutinations which were positive in this sampling.

TABLE 1

276 RANDOM HUMAN SERA TESTED FOR LEPTOSPIROSIS

Human Sera	*Leptospira Icterohemorrhagiae*	*Leptospira Canicola*	*Leptospira Pomona*
268	0	0	0
1	0	0	+
2	0	0	+
3	+	0	0
4	0	+	0
5	0	0	+
6	0	0	+
7	0	+	0
8	+	0	0

0—Negative Leptospiral Agglutination
+—Positive Leptospiral Agglutination

These figures compare closely with the results of a similar survey in South Dakota in which Cox[11] found 3.2 per cent with antibiotics to leptospira.

A somewhat higher Missouri incidence was obtained in 1956 in an investigation of a select occupational group. Higginbotham, Goldberg, and Logue[12] reported that 5.2 per cent of Missouri veterinarians had leptospiral antibodies. Three years later 7.6 per cent of this same veterinary group had sera with positive titers for Leptospirosis.

TABLE 2

105 SERA FROM VETERINARIANS TESTED FOR LEPTOSPIROSIS

Veterinary Sera	*Leptospira Icterohemorrhagiae*	*Leptospira Canicola*	*Leptospira Pomona*
97	0	0	0
1	0	0	+
2	0	0	+
3	+	0	0
4	0	+	0
5	0	0	+
6	0	0	+
7	0	+	0
8	+	0	0

0—Negative Leptospiral Agglutination
+—Positive Leptospiral Agglutination

In Iowa, Heeren[13] found that 16.4 per cent of veterinarians had positive leptospiral titers. In another risk group in Nebraska, Bence and Miller[14] found that 6.4 per cent of packing house workers had leptospiral antibodies in their sera. A similar survey in this state should provide comparable data on exposure of Missouri slaughter house workers to leptospirosis. Another approach in bringing to light frank cases of human leptospirosis was inaugurated in Iowa two years ago. This study involves the routine leptospirosis testing of blood specimens submitted to the state laboratory for febrile agglutinations. To date, 35 acute cases of human leptospirosis due to *L. pomona* have been identified and confirmed.[15] This approach is also contemplated by the Missouri group and should provide additional opportunity in uncovering unrecognized cases of leptospirosis.

Preliminary results of the testing of sera from various animal species in the state have revealed

TABLE 3

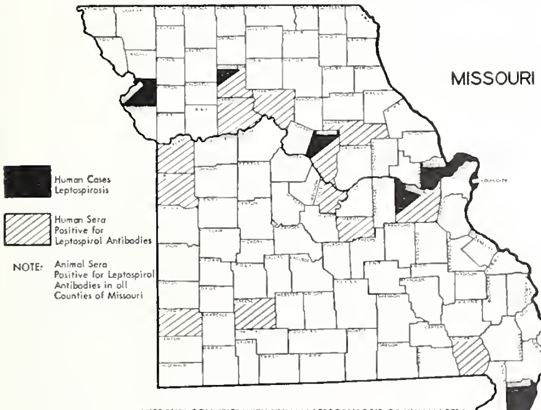
RANDOMLY SELECTED ANIMALS SHOWING POSITIVE AGGLUTINATIONS FOR LEPTOSPIROSIS

Animal	*Number of Specimens*	*Positive Agglutinations*	*Per Cent Positive*
Bovine	67	28	41.8
Horse	17	6	35.3
Dogs	138	46	33.3

a high percentage of reactors. This was anticipated from results obtained in surveys in other states.[16] As is indicated by table 3 many domestic animals with positive titers are being detected in Missouri.

In addition to domestic animals, various species of wildlife have been incriminated across the United States as being reservoirs to Leptospira. Serologic surveys have disclosed a high incidence of antibodies. Isolations of *Leptospira* have been made from healthy wildlife carriers.[17] Specimens of deer blood taken in 1958 in Missouri revealed many reactors. During the hunting season of 1959, the Missouri Conservation Commission submitted 141 specimens of serum from several widely separated areas of the state. Of these 37 or 26.2 per cent were positive.

The results as given for both domestic and wild animals compare closely with those obtained in other states. In New York, 12.8 per cent of 1,074 bovine specimens were positive.[16] A recent report from Illinois reveals 32.2 per cent of 659 dogs were positive for leptospiral antibody.[18] In a study of 350 cats,[19] seventeen or 4.9 per cent have been found to be positive. A survey of deer in Ohio[20] has yielded a percentage of 20, comparable to that determined in Missouri.


MISSOURI
Human Cases Leptospirosis
Human Sera Positive for Leptospiral Antibodies
NOTE: Animal Sera Positive for Leptospiral Antibodies in all Counties of Missouri

MISSOURI COUNTIES WITH HUMAN LEPTOSPIROSIS OR HUMAN SERA POSITIVE FOR LEPTOSPIRAL ANTIBODIES 1954–1959

The results from Missouri are as yet incomplete; however, they do indicate that evidence of leptospirosis is widespread. The Missouri map indicates those counties where leptospiral antibodies or frank human leptospirosis has been detected.

The very nature of the disease in animals literally invites uninformed persons to expose themselves. In swine and mature cattle, abortions are usually the most prominent clinical feature of the disease. Humans come in contact with infective discharges in caring for these animals. Animal carriers shed myriads of leptospira at each urination.

Outside the body leptospires have been found to survive for several weeks in moist soil, stagnant ponds and slow moving streams, especially in the late summer when the temperature is optimum for their growth.[21] Although several outbreaks of leptospirosis from swimming in contaminated water have occurred,[22, 23] this has not yet been reported in Missouri.

The high percentage of Missouri animals with leptospiral antibody indicates a potent public health problem. Missouri can anticipate therefore, an increasing awareness of leptospirosis as improved epidemiologic and diagnostic facilities become available.

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Traumatic Transthoracic Diaphragmatic Herniation of the Stomach

Traumatic transthoracic diaphragmatic herniation of the stomach is discussed, together with a discussion of its roentgen manifestations. Two cases are presented to illustrate.

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Traumatic transthoracic diaphragmatic herniation of the stomach often results in severe cardiac and respiratory embarrassment and may on occasion constitute a surgical emergency. The roentgenographic appearance of this entity may be sufficiently characteristic to permit immediate diagnosis and institution of corrective treatment. Two patients with traumatic transthoracic diaphragmatic herniation of the stomach with typical roentgen signs are presented to illustrate the diagnostic features of this form of diaphragmatic hernia.

Case Reports

Case 1. R. C., a 12 year old negro boy was transferred to the University of Missouri Medical Center from another hospital 12 hours following a head on automobile collision, in which he suffered severe chest and abdominal trauma. His referral was necessitated by increasing cardiac and respiratory embarrassment.

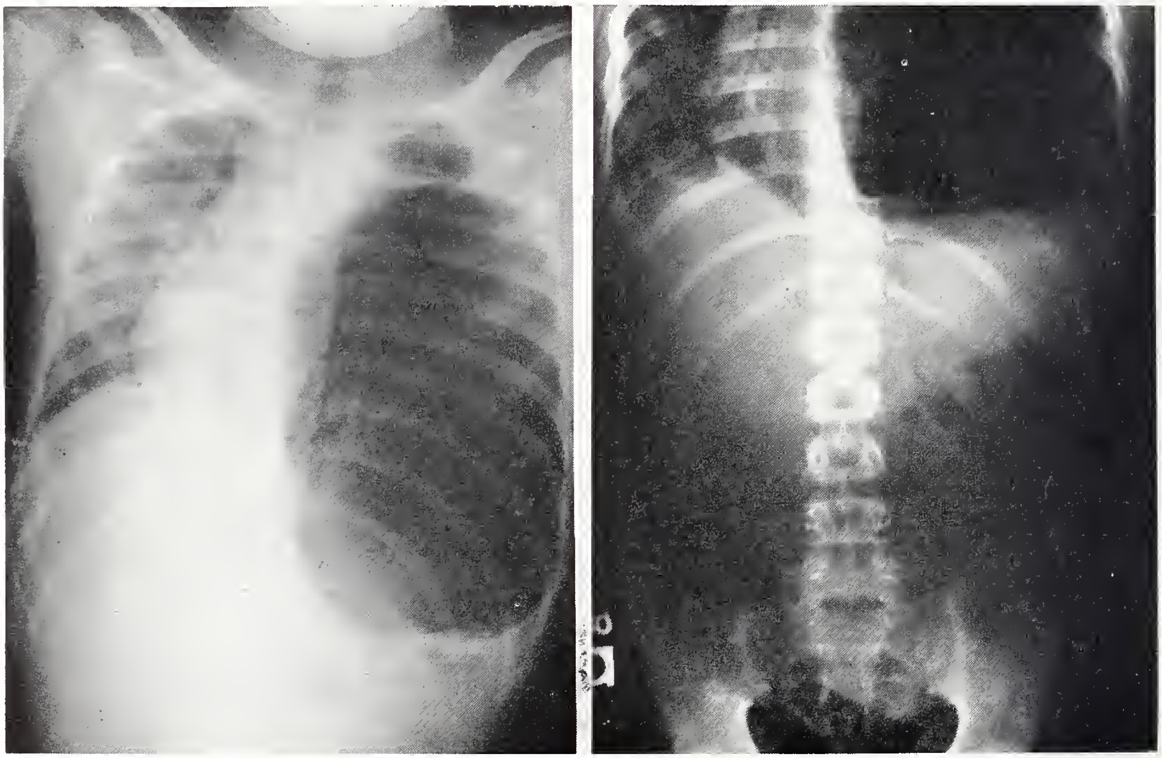

Fig. 1. A. Roentgenogram of the chest shows the typical appearance of traumatic transdiaphragmatic herniation of the stomach. The stomach is markedly dilated and displaces the mediastinum to the right. Note gas outlining the esophagus. B. Roentgenogram of the abdomen made in the upright position shows an air-fluid level in the stomach and paucity of gas elsewhere in the gut.

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Physical examination showed the boy to be tachypneic and breathing with considerable difficulty. The pulse rate was 140 per minute. The trachea was deviated to the right and the left chest was less mobile than the right. Breath sounds and vocal fremitus were absent over the left lower chest with hyperresonant, tympanic percussion notes over the same area. Examination of the abdomen showed tenderness in the left upper quadrant. No bowel sounds were heard.

Roentgen examination of the chest and abdomen showed evidence of herniation of the stomach through the diaphragm into the left hemithorax (fig. 1). The markedly distended stomach occupied the major portion of the left hemithorax and displaced the mediastinum to the right. The gas filled esophagus was seen displaced similarly. The abdomen showed a large air-fluid level in the stomach and paucity of gas elsewhere in the gut. Other injuries included a fracture of the left humerus.

The stomach was decompressed by passing a nasogastric tube. His pulse rate decreased and his general condition improved remarkably. He was taken to surgery approximately 17 hours following admission.

At thorocotomy a rent approximately 7 inches in length was found in the dome of the left hemidiaphragm, through which the stomach had herniated. The rupture was repaired without complication.

The patient's postoperative course was benign and he was discharged six days following admission.

Case 2. D. F., a 19 year old white male was admitted to the University of Missouri Medical Center approximately 13 hours following an automobile collision in which he suffered injury to his chest.

Physical examination showed a patient in acute distress, sweaty and with respiratory difficulty. Breath sounds were diminished on the left with hyperresonance over the lower portion of the hemithorax and dullness over the upper portion. The point of maximum cardiac intensity lay approximately 1 cm. lateral to the right sternal border. The abdomen showed hypoactive bowel sounds and tenderness in the left upper quadrant.

Roentgenograms of the chest and abdomen (fig. 2) showed herniation of the stomach through the left hemidiaphragm with compression of the left lung superiorly and displacement of the mediastinum to the right. The posterior portions of the left 5th, 6th and 7th ribs were fractured. The abdomen showed a moderate accumulation of gas in the colon. An intertrochanteric fracture of the left femur, as well as fractures of the sacrum and right pubis, were also found on roentgen examination.

A Levine tube was passed into the stomach and a large volume of air with 700 cc. of dark brown fluid were removed. The fluid showed a positive guaiac test.

Surgery was performed on the day of admission. A 5 inch rent in the left hemidiaphragm was found

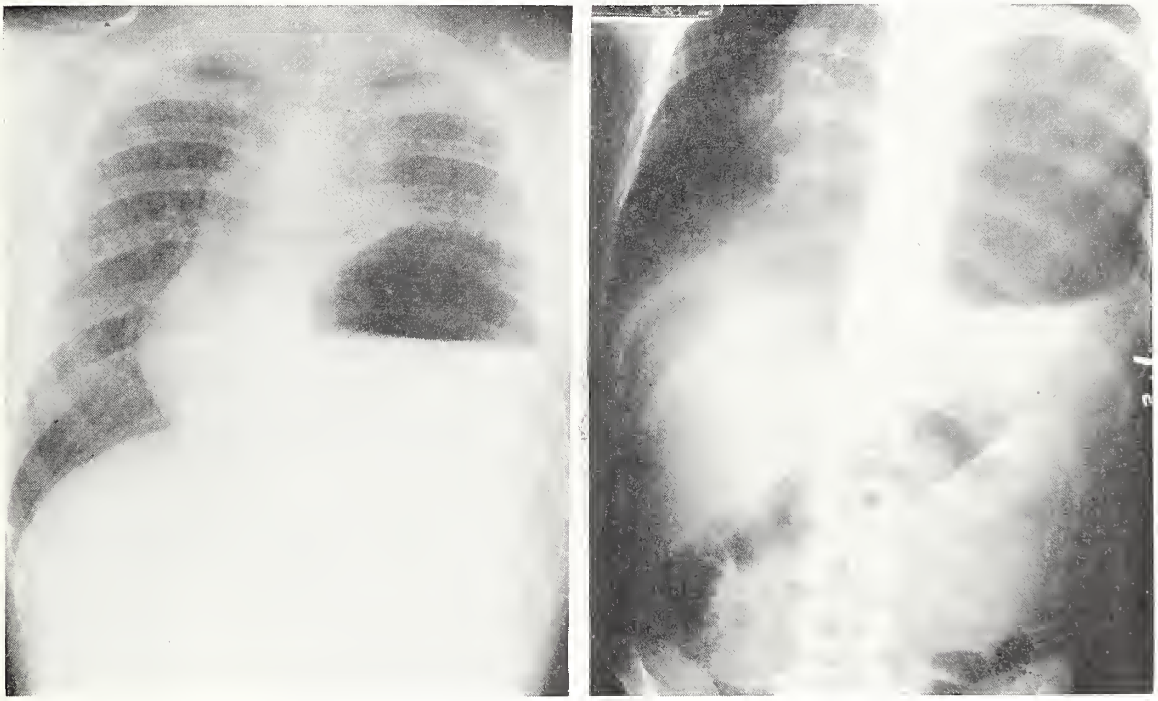

Fig. 2. A. Roentgenogram of the chest shows an appearance remarkably similar to that of Figure 1A, indicating traumatic transdiaphragmatic herniation of the stomach. The stomach occupies the left hemithorax, displacing the mediastinum to the right and compressing the lung from below. B. Roentgenogram of the abdomen made in the supine position shows to better advantage the degree of dilatation of the stomach.

through which the stomach had herniated. The inferior pole of the spleen was lacerated. Splenectomy and repair of the diaphragm were carried out.

The patient's hospitalization was prolonged for care of his fractures. No complications with regard to his diaphragmatic hernia were encountered.

COMMENT

Injuries resulting from automobile accidents are the commonest cause of traumatic diaphragmatic hernias. These usually follow a crushing injury or a violent flexion of the body. Harrington[1] has pointed out that the traumatic type of hernia may be due to either direct or indirect injury to the diaphragm. In cases of indirect injury the hernia may occur at any point, but the most common sites are the dome and the posterior half of the left hemidiaphragm.

Any of the abdominal organs except those in the pelvis may be involved in a hernia, but the most common are the stomach, large and small bowel, spleen and liver.[2] There is no limiting sac and the herniated stomach is in direct contact with the lung and pericardium.

The symptoms of traumatic transthoracic herniation of the stomach usually, but not necessarily, develop soon after the injury and are rapid in progress. These symptoms are attributable to the mechanical interference with function of the herniated viscera as well as to interference with function of the heart and lungs. The symptoms in these patients are those which are most commonly seen, namely, those due to respiratory and circulatory embarrassment. Later, severe hemorrhage from the gastrointestinal tract may occur as a result of incarceration or strangulation of the hollow viscera.[1]

Roentgenographic examination will usually suggest the diagnosis. The lung on the affected side is crowded superiorly and the mediastinum displaced away from the herniated stomach. The latter structure shows various degrees of dilatation, but often this dilatation may be massive. The esophagus may be seen filled with air and is displaced with the mediastinum. The relationship between the stomach, esophagus and duodenum are apparently so altered to permit swallowed air to enter the stomach, but not its evacuation by physiologic means. Progressive gastric dilatation follows, in contrast with a relatively normal distal intestinal gas pattern. In some patients in whom the diagnosis is not immediately apparent it may be necessary to utilize opaque media to determine the nature of the abnormal structure in the left hemithorax.

Surgical treatment of traumatic transthoracic diaphragmatic herniation of the stomach is usually demanded because of the danger of cardiac and respiratory failure. However, it is best not to operate until the acute symptoms have subsided if the patient's condition will permit. Tube decompression of the dilated stomach may help immeasurably in attaining this end.

SUMMARY

The diagnostic features of traumatic transthoracic diaphragmatic herniation of the stomach have been presented and illustrated by two typical examples of this entity. Roentgenography makes the most important contribution to the correct diagnosis. These diagnostic features are described in detail.

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JOHN A. BUESSELER, M.D., ***Columbia***

Glaucoma Detection

A Problem for General Medicine

INCIDENCE

EACH YEAR approximately 2,600 persons go totally blind from glaucoma in the United States. An aggregate of 31,000 persons, of the 160,000 totally blind people in this country, have gone blind from this easily diagnosed and treatable disease.[1]

These facts in themselves make glaucoma the principle cause of blindness in America and as such a public health problem of paramount importance.

A survey of 10,500 adult industrial workers over the age of 40 years made by the Philadelphia Committee for Prevention of Blindness revealed that 280 persons, or 2.7 per cent of the total group, possessed previously undiagnosed ocular hypertension. Only four of the entire 10,500 workers knew they had glaucoma. On the basis of these figures it is estimated that approximately one million adult Americans have glaucoma and do not know it.[2]

A similar survey conducted among the civilian employees at Wright-Patterson A. F. B. revealed a 2.9 per cent incidence of previously undiagnosed glaucoma in persons 40 years of age and older.[3] This latter study utilized a tonometer specifically designed for use by the general physician, namely the Berens-Tolman Ocular Hypertension Indicator.* More recently, screening program reports reveal that even in the 30 to 39 year age group, the prevalence of glaucoma has been found to be 1 per cent.[4] On a relative basis as reported by Garner and Haessler, glaucoma occurs approximately twenty times as frequently as tuberculosis and five times as often as cancer.[5]

Since glaucoma is the principle cause of blindness in this country and the general physician sees many more patients than does the ophthalmologist, a method to combat blindness from glaucoma is advanced.

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This paper was presented at the Southwest Missouri Chapter of the Missouri Academy of General Practice Summer Seminar, held in Springfield, June 21, 1959.

DETECTION

Diagnostic Sign.—Because blindness from glaucoma can usually be prevented or arrested by early diagnosis and treatment, the problem as encountered in the American system of medical practice is largely one of early glaucoma detection.

Diagnostically, the principle manifestation of glaucoma is an abnormally elevated ocular tension which is the result of an increased intraocular pressure. In this regard, of all the varieties of glaucoma, "open angle" or so-called chronic simple glaucoma poses the major public health problem. There is no pain or visual disability in the early stages of this disease; however, the increase in ocular tension of a mild to moderate degree above normal is a measurable early sign. It is upon this sign that early detection is primarily based.

Tonometry.—Ocular tension is measured with a tonometer. The standard device consists of a tube, the lower end of which is a concave foot plate shaped so as to fit the curvature of the cornea of the eye. A cylindrical weight within the tube depresses the cornea in inverse proportion to the firmness of the eyeball (fig. 1). A scale on the instrument provides a means of measuring the depth of depression and indirectly the ocular tension. As a preliminary to tonometry, a drop of topical ophthalmic analgesic (e.g.: tetracaine hydrochloride 1 per cent ophthalmic solution) is instilled in the cul-de-sac of each eye. Following this, the tonometer with sterilized foot plate is carefully and gently positioned on the center of the cornea so that the tube is held directly vertical (fig. 2). The procedure is brief and routinely consumes about one minute of time.

Screening Responsibility.—In the past, the ophthalmologist has borne the major burden for glaucoma detection. Unfortunately, the victims of glaucoma have frequently not specifically re-

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* Manufactured by R. O. Gulden Company, 225 Cadwalader Avenue, Philadelphia, Pennsylvania.

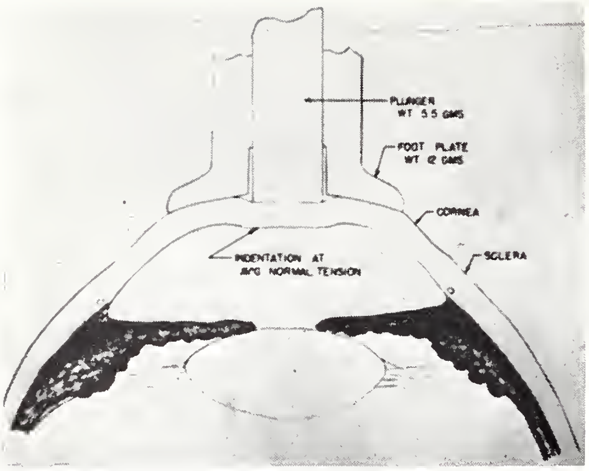

Fig. 1. Cross-section of eye and tonometer showing indentation.

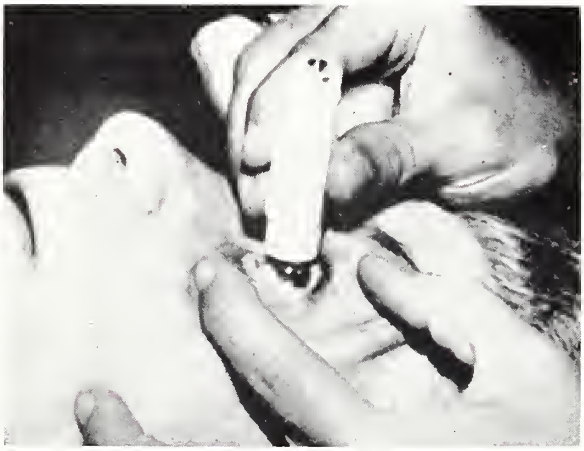

Fig. 2

ferred themselves to an eye physician until after far-advanced and irreversible damage had been done to the visual apparatus.

To prevent these often repeated tragedies of late diagnosis in glaucoma, the Ophthalmologic Foundation of New York, with the energetic guidance of Dr. Conrad Berens, has launched an increasingly successful plan for prevention of blindness from glaucoma through cooperation between ophthalmologists and other physicians.[1] Intraprofessional cooperation is essential because general practitioners and other physicians see probably one hundred times as many patients as do ophthalmologists. In this latter regard, the Glaucoma Research Project section of the Ophthalmological Foundation estimates that approximately one third of the total number of probable undiscovered cases of glaucoma are already within the clientele of the general practitioner.[4] Thus, of all physicians, the general practitioner occupies a potentially key position in any realistic cooperative detection program.

It is apparent that in order to effectively facilitate the screening of patients for possible glaucoma, ocular tension determinations must be incorporated into every physician's routine physical examination on patients over 30 years of age. Such a philosophy is being taught in an ever increasing number of medical schools so that the young physicians now being graduated will have an ingrained sense of their responsibility in the control of this major disease. At the University of Missouri, the Berens-Tolman ocular hypertension indicator for general physicians is a recommended instrument for inclusion in the medical student's kit of diagnostic equipment. Prompt referral of any suspected cases to an ophthalmologist is the completing link in the intraprofessional detection program.

It is generally agreed that wholesale public screening of the population at random by skilled "glaucoma detection" teams is a constructive contribution to the problem of uncovering cases of this disease. However, it must also be apparent to all physicians that the need for such mass production testing programs would be minimized if glaucoma detection was made a routine part of each physician's physical examination procedure on his own patients. The latter method is obviously more in keeping with the traditional American mode of medical practice, namely, that of providing the best available health services to the people through the care of their personally selected physicians rather than by a system of semi-regimented mass movement health campaigns.

Treatment Responsibility.—The most important step in the treatment of any disease is the recognition of its existence. Once glaucoma has been detected, the ophthalmologist must meticulously evaluate the individual case in regard to the type of glaucomatous process involved, the degree of impairment of the hydrodynamic mechanism in the eye, and the manifestations of damage to the visual system of the patient. Such study, though time consuming, is essential for planning and managing the program of medical or surgical therapy.

The medical armamentarium for the treatment of glaucoma involves the use of: (a) topical miotic drugs, (b) topical aqueous secretory depressants, (c) systemic carbonic anhydrase inhibitors and (d) systemic osmotic diuresis. The selection of drug or combination of drugs, dosage and treatment scheduling is the duty of the

IAN M. THOMPSON, M.D., ***Columbia***

Management of Urinary Stress Incontinence

THE URINE STORED in the bladder is controlled by (1) the ability of the involuntary muscle of the bladder reservoir to accommodate to increasing increments of urine with constantly low intravesicular pressures, and (2) tonic coaptation of the vesical outlet muscle fibers until contraction of the remainder of the bladder pulls the outlet musculature open. Further prerequisites are, of course, an intact reflex arc with the spinal cord, and the integrity of the communicating sensory and motor pathways to the brain. There has been insufficient emphasis of the fact that the bladder fundus, vesical neck and posterior urethra are all portions of one and the same syncytium of involuntary muscle. The different parts of the syncytium differ only in their configuration and in their fixation to surrounding attachments. Thus, all of the bladder musculature might be expected to function in a manner similar to smooth muscle wherever its location.

There are two broad categories of non-fistulous urinary incontinence—mechanical and neurogenic. In each, similar basic physiologic prerequisites exist, namely, laxity of the vesicourethral outlet or hyperactivity of the expulsive bladder musculature.

Various causes of urinary stress incontinence are discussed as well as diagnosis and therapy. The conclusion is drawn that there is no necessity for a patient to suffer stress incontinence.

Dr. Thompson is Associate Professor of Surgery (Urology) and Chairman of the Section of Urology at the University of Missouri School of Medicine.

Stress incontinence is the most prevalent of the mechanical forms of involuntary loss of urine from the bladder. It occurs most commonly in parous women of middle age and in men following prostatectomy. It may also be seen in individuals of any age who have infections with weakening or traumatic shortening of the urethro-vesical musculature. In the female the urethra is shorter and, for the most part, devoid of the encompassing tissue supports of the male posterior urethra. As a result of stresses of parturition and of diminution in muscle resiliency with advancing age, the female urethra is less capable of withstanding the pressures produced

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Glaucoma—Continued

ophthalmologist and is based on his initial and follow-up evaluations of the individual case involved. The surgical procedures, fundamentally, are intended to either improve or provide new channels of aqueous drainage or to reduce the amount of aqueous secretion within the eye. The utilization of surgical treatment by the ophthalmic surgeon is also based on these principles of individualized management of the patient's ocular pathology.

SUMMARY

Glaucoma is a major health problem because of its relatively high incidence and because it is the principle cause of blindness in the United States.

Since blindness from this disease is usually preventable by early diagnosis and treatment, the problem is one of early detection.

Diagnostically, the pathognomonic manifestation of glaucoma is an abnormally elevated ocular tension relatively easily determined by means of a tonometer.

Because general practitioners and other physicians see hundreds of times as many patients as do ophthalmologists alone, intraprofessional cooperation in glaucoma is mandatory and best accomplished by incorporating tonometry into every physician's routine physical examination on patients over thirty years of age.

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by large amounts of urine in the bladder. This is why in women an increase of pressure within or upon the urinary bladder may cause an involuntary loss of small or large amounts of urine. It can be stated categorically that the indisputable cause of stress incontinence is a mechanical failure of the muscle fibers of the outlet area to remain in apposition with sufficient tone or over the necessary critical urethral length. This is true regardless of armchair-theorizations concerning urethro-vesical angles.

The diagnosis is often immediately suggested during the patient's recounting of symptoms. The latter may range from sporadic wetting of the underclothes associated with coughing, sneezing or sudden changes in position, to saturation of protective pads on even slight exertion. A detailed history is obviously invaluable in eliciting symptoms which might be suggestive of other causes of micturitional dysfunction.

Urologic examination is always warranted prior to any therapeutic effort, regardless of the seemingly straightforward nature of the incontinence. If only symptoms are considered, neurologic, infections or obstructive problems may at times simulate stress incontinence. The exclusion of these other etiologic factors, however, is relatively simple and the time and effort expended is amply rewarded in the avoidance of ill-conceived or potentially disastrous therapeutic measures.

In women during the initial examination, the introital area should be carefully examined for evidences of extra-urinary sources of infection which might be responsible for a bladder infection. The urethra must be firmly palpated and milked outward to exclude a urethral-diverticulum. The latter are frequently an undetected cause of cystitis and incontinence. Also, the rare but often grossly discernible ectopic ureteral orifice should be looked for. Any suspicious para-urethral openings should be fully investigated with contrast media injections.

The use of the catheter as a diagnostic tool is well warranted in instances of incontinence. The hazards relative to its introduction of infection are overridden by the necessity for such diagnostic effort and the probability that a surgical procedure subsequently requiring an indwelling catheter will be necessary.

In women the catheter can be used to obtain bladder urine in a sterile fashion for analysis of cellular constituents and bacteria. Examination of the stained sediment will quickly reveal the presence of infection as a possible cause of the incontinence.

In both sexes the catheter can determine the presence of post-voiding urinary residuum, of great importance in the investigation of obstructive uropathy as a cause of incontinence.

The catheter may further be useful for the performance of cystograms and cystometric studies. The shape, capacity and tone of the bladder can often be adequately demonstrated by catheter cystogram. Should reflux of contrast media up the ureters be visualized, an obstruction of the bladder outlet or the urethra may certainly be postulated. Cystometric studies have unfortunately had scant acceptance as routine measures in the evaluation of incontinence owing to general uncertainty as to interpretation of the results. The water cystometer simply measures the reaction of the bladder to the introduction of increasing increments of fluid—a process simulative of the natural course of events as the ureters rhythmically discharge spurts of urine into the vesical cavity. Normally the bladder maintains a constant, rather low, intravesical pressure without fluctuation until the point of normal capacity is reached, when a desire to void is perceived. Micturition is then attempted, and a sharp rise in pressure occurs. Sensation to filling is normally present and clearly appreciated as the usual voiding capacity is reached. Abnormality is delineated by characteristic variations from this normal cystometric pattern, obviously in conjunction with any discrepant peripheral neurologic findings. Thus a definitive diagnosis of a neurologic deficit affecting any portion of the bladder reflex arc, spinal tracts or cerebral pathways may be established and pinpointed.

Subsequent to the foregoing procedures, two additional examinations should be undertaken in any instance of incontinence. Intravenous pyelograms are performed to make certain that the less frequent causes of incontinence are excluded. Duplication anomalies and ectopic ureteral orifices may frequently be immediately recognized by their urographic characteristics, thus permitting clarification of a perplexing problem of incontinence. Uretero-vaginal fistulas are often first suggested by the appearance of an unsuspected hydronephrosis and hydro-ureter. Renal tuberculosis which can produce such an intense vesical irritation as to simulate incontinence may be clearly demonstrated by the pyelographic study. Cystoscopy obviously is of value in confirming the presence or absence of obstruction as a cause of incontinence and will provide precise evidence of a vesico-vaginal fistula. The endoscopic characteristics of tuberculosis, infections, tumors, outlet obstructions and vesico-ureteral anomalies will be readily apparent to the endoscopist and permit differentiation of any questionable clinical symptoms related to urinary incontinence.

The final point in the establishment of the diagnosis of stress incontinence can again be achieved with the use of the catheter. If the bladder is filled with fluid, the patient can be watched as she sits up, stands, walks about and on command increases her intra-abdominal pressure by straining or coughing. Involuntary seepage of urine can then be observed and its severity judged.

Despite statements regarding the relationship of cystocoele to stress incontinence, there is no valid evidence that cystocoele *per se* is either causative or necessarily associated with incontinence. Many experienced surgeons and gynecologists have tacitly, if not publicly, come to this conclusion. This is based on the failure of anterior repair procedures to eliminate incontinence. This would obviously imply that urethro-vesical support is not the answer and this has been proven experimentally and clinically. If the urethro-vesical neck musculature cannot remain firmly in apposition over the normal critical length of outlet, then varying degrees of incontinence will occur. Indeed any therapeutic procedure which is not founded on the restitution of such muscular coaptation is irrational and doomed to failure.

Stress incontinence in the male is most frequently of iatrogenic origin. It occurs almost exclusively after prostatectomy. The initial etiologic factor is probably a weakening of the outlet muscle by the prolonged stretching effect of the enlarging prostatic adenoma; subsequently the infection the obstruction produces has a tendency to destroy the posterior urethral musculature. From the surgical and postoperative aspects the production of incontinence results either from a diminution in normal urethro-vesical length or a destruction of the muscular capacity of the outlet to contract, or a combination of the two.

Of greatest importance in the therapy of stress incontinence is rigorous diagnostic exclusion of other causes of urinary incontinence. Therapy can be quite varied and may be governed by severity of the incontinence. Adequate treatment of an associated bladder infection may reduce the incontinence to an almost negligible point. A trial of local and systemic estrogen is certainly worth while in the milder forms of the condition and where an atrophic appearance of the urethral-vaginal exterior is noted. In certain instances of mild stress incontinence the time honored routine of urethral dilatations, bladder irrigations, and arygyrol, protargol or silver nitrate urethral installations may, with or without estrogen therapy, be of great benefit, apparently from a purely stimulative effect upon the outlet musculature.

In the majority of instances in women when stress incontinence is moderately severe surgical intervention will be needed. The Mashall-Marchetti type of procedure has been successful because it elongates and produces coaptation of the outlet musculature. It is relatively simple to perform, and it is perfectly satisfactory in the milder forms of incontinence. In the more severe forms or when the Marshall-Marchetti has failed, tubular reconstruction of the outlet must be undertaken for a successful outcome. The outlet must be tubularized for at least 3 centimeters and viability of the muscular tube insured. Intratubular manometrie pressure determinations govern the formulation of proper tubular caliber.

In the male, stress incontinence must invariably be dealt with surgically. In less severe cases, the Marshall Marchetti procedure may be satisfactory. We have had excellent results with total reconstruction of the posterior urethra and bladder neck by separate or combined abdomino-perineal tubularization procedures. Moreover, we have no hesitancy in advocating reconstructive surgery irrespective of previous reparative attempts.

There is no necessity for any man to suffer continuing incontinence subsequent to prostatectomy. There is no necessity for any woman to have a wet perineum because of stress incontinence.

CARL H. ALMOND, M.D.; M. PINSON NEAL, M.D.,
and* KARL R. MOEDL, M.D., *Columbia

Regional Ileitis With Coincident Ileal Carcinoma

A Case Report

THE INCIDENCE of carcinoma of the ileum in an area of regional enteritis is small. In Crohn's 1958 report and review of 542 cases,[1] he reports one case in which carcinoma was present in the jejunum in a typical case of regional enteritis. He also refers to one case of adenocarcinoma of the ascending colon with typical regional enteritis reported by Warren and Sommers.[2]

The incidence of carcinoma of the ileum in an area of regional enteritis is small. In a report of 542 cases one case was reported. A case report of this unusual occurrence is presented.

Dr. Almond is Assistant Professor of Surgery; Dr. Neal is Professor Emeritus of Pathology, and Dr. Moedl is Assistant Instructor and third year resident in Surgery at the University of Missouri School of Medicine, Columbia.

CASE REPORT

A 48 year old white female was admitted to the University of Missouri Medical Center on December 6, 1959, with a history of two and one half years of intermittent bloody diarrhea, four weeks of generalized intermittent abdominal cramps, and one week of vomiting, distention and constipation.

Physical examination on admission revealed an acutely and chronically ill dehydrated female patient. The bowel sounds were active and the abdomen was not distended. There was right costovertebral angle and suprapubic tenderness.

Routine laboratory studies, chest x-ray, proctoscopic, and barium enema examinations were not remarkable.

During hospitalization the patient suffered from intermittent symptoms of partial small bowel obstruction consisting of abdominal cramps and distention. Roentgenographic studies were compatible with partial obstruction of the distal small bowel.

Laparotomy on December 17, 1959, demonstrated as constricting inflammatory lesion of the distal ileum 13 centimeters proximal to the cecum. This involved segment was adherent to the urinary bladder. Proximal to this lesion for 100 centimeters there were segments of ileum which were hyperemic, thickened and edematous with the mesentery studded with enlarged lymph nodes.

An operative diagnosis of regional ileitis was made. A biopsy specimen for frozen section was taken from the constricted area. This was interpreted as an inflammatory granuloma. The terminal ileum was dissected from the adherent urinary bladder. A 100 centimeter portion of distal ileum including multiple involved segments was resected and an ileo-transverse colostomy was performed.

The permanent sections revealed carcinoma in the ulcerated area of the ileum. Consequently, the patient underwent a second operation on January 7, 1960, with resection of the right colon and it's mesentery and partial cystectomy of the urinary bladder where it previously had been adherent to the ileum. These tissues contained no carcinoma.

PATHOLOGY

Grossly the 98 centimeter section of small intestine had a partial stenosing constricture beginning 3 centimeters from the distal (cecal) end. Here, for a

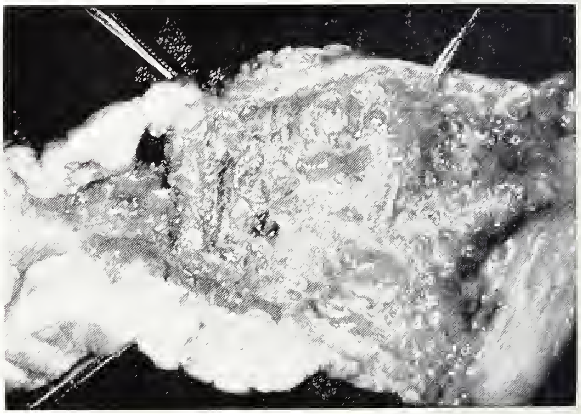

Fig. 1. Terminal ileum with 4 cm. area of constricting (stenosing) adenocarcinoma, having a crater-like ridge between it and a 12 cm. area of ulcerative granulomatous regional ileitis.

distance of 4 centimeters, the wall was thick, firm, resistant and fibrous in appearance. An instrument of 1 centimeter diameter was barely passed through the narrowed lumen. There was a granulomatous ulcerated lesion that involved the mucosa for a distance of 12 centimeters immediately proximal to this area. The lining of the ulcerated area was thick, reddened, piled up in areas and coarsely granular to finely nodular. Near the lower end of the ulcer the mucosa was thickened around a 5 centimeter circular area to resemble a crater-like rim.

At both ends of the ulcerated area there was sharp demarcation as from the constricted area distally to an essentially normal mucosa. Above the stenotic level the intestinal tract was dilated. Between the ulcerated area and the proximal end were several distinct and separate areas where the wall was mildly thickened, indurated and leather-like. Over these the serosal surfaces were reddened and the venous vascular channels conspicuously engorged, but the mucosa was not impressive. Over the peritoneal surfaces of these areas was a fine, thin fibrin deposit. Twelve soft, rather pink lymph nodes varying in size from 7 millimeters to 2 centimeters were found in the mesentery.

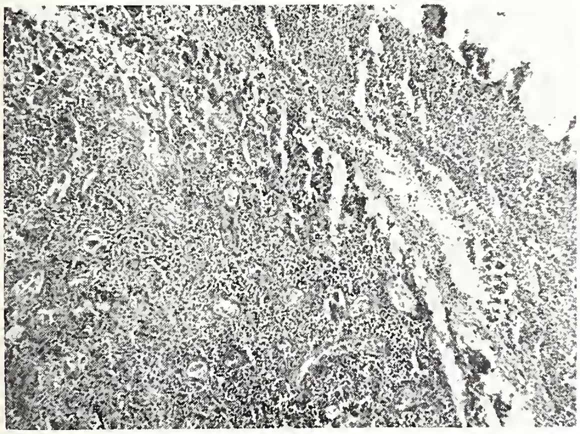

Fig. 2. Floor of ulcer overlying granulation tissues with myriads of reactive cells. × 70.

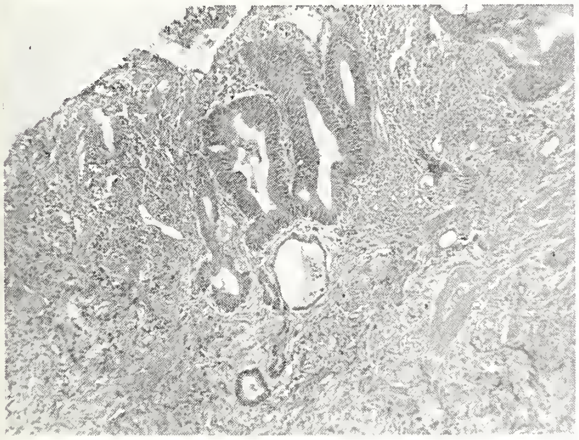

Fig. 3. Margin of ulcer and tumor. Abnormal glands, with atypical cells invading submucosa. × 320.

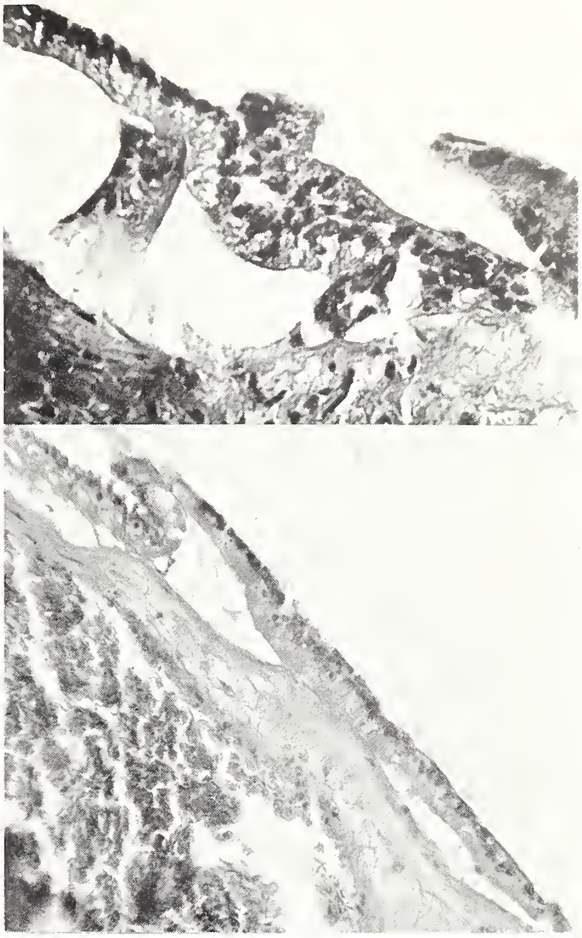

Fig. 4. Peritoneal surface of ileum. A group of adenocarcinoma cells attached to the peritoneal surface between the ileum and urinary bladder. Upper insert × 450; lower × 250.

Microscopically there are two distinct and different lesions: (1) a nonspecific (etiologically speaking) granulomatous ulcerative inflammation, a regional ileitis and (2) an adenocarcinoma. Sections of the *ulcerated area* show a necrosis with sloughing of the mucosa and submucosa. Forming the floor are myriads of polymorphonuclear neutrophils, a rather rich granulation tissue with spaces between the vascular channels containing numerous "reactive cells"—chiefly lymphocytes, large mononuclear leukocytes and fibrous tissue cells with groups of polymorphonuclear neutrophils and an occasional multinucleated (giant) cell. No evidence of amoebiasis is found. The inflammatory reaction extends through the thickness of the gut wall, but in the outer portion, the dominant "reactive cells" are lymphocytes and fibrous tissue cells. Dilated vascular beds appear beneath the peritoneal surface.

From the University of Missouri Medical Center

Clinical Pathologic Conference

Internist: C. THORPE RAY, M.D., ***Columbia***
Surgeon: HUGH E. STEPHENSON, JR., M.D., ***Columbia***
Radiologist: THEODORE KEATS, M.D., ***Columbia***
Pathologist: JOSEPH E. FLYNN, M.D., ***Columbia***

The case history of this clinical pathologic conference deals primarily with the problem of jaundice.

Dr. Ray is Professor and Head of the Department of Internal Medicine; Dr. Stephenson is Professor and Head of the Department of Surgery; Dr. Keats is Professor of Pathology and Dr. Flynn is Professor and Head of the Department of Pathology.

ABSTRACT OF THE PATIENT'S MEDICAL CHART

History.—A 56 year old white widow and garment factory seamstress was admitted to the surgical service of the University Hospital on March 23, 1959, because of recurrent abdominal pain off and on for 20 years. Six years ago she had epigastric pain, fatty food intolerance, nausea without vomiting, bloating and jaundice. She had an "x-ray of her gallbladder" at this time and was told the gallbladder was diseased. In September, 1958, she again had epigastric pain of a cramping nature associated with an intermittent fever; she had additional x-rays. This time she was told she had an "ulcer between her gallbladder and duodenum." Seven weeks prior to her admission to the University Hospital she developed dark urine, light-colored stools, itching and a yellowish sclerae. She entered an outside hospital on February 22 for observation. There she was told her liver was damaged. On Feb-

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Case Report—Continued

The *tumor* is characteristic of an adenocarcinoma with atypical, hyperchromic staining cells and bizarre shaped glands. These are most evident at the lower ulcer margin, principally making up the "crater rim" and continuing into and through the muscular wall. Microscopic clusters of tumor cells are present on the peritoneal (serosal) surface at the site where there were adhesions to the urinary bladder wall.

The twelve *lymph nodes* show marked increase in pulp cells and the germinal centers are numerically as well as dimensionally increased. In none of them is there evidence of neoplastic involvement.

Diagnosis.—(1) Ulcerative, granulomatous regional ileitis, chronic. (2) Adenocarcinoma, terminal ileum with local involvement of visceral peritoneum. (3) Hyperplasia, mesenteric lymph nodes.

COMMENT

Both Bell[3] and Boyd[4] have commented that in regional ileitis one may sometimes find affected segments interplaced between normal portions of intestine.

DISCUSSION

The preoperative diagnosis was partial small bowel obstruction. Operative diagnosis was partial small bowel obstruction secondary to chronic regional ileitis. The operation was performed for regional ileitis. If the diagnosis of carcinoma could have been established at the time of operation, the surgical procedure would have been more extensive including resection of the cecum and ascending colon with their portions of mesentery and the involved portion of the urinary bladder.

CONCLUSION

This is a case report of adenocarcinoma in an ulcerated area of chronic regional ileitis of the distal ileum.

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ruary 24 while in the outside hospital she had a severe nasal hemorrhage. This was stopped by cauterization. She was temporarily lethargic after this episode. Subsequently, the patient had noted the recurrence of the yellow discoloration of her eyes every two to three days.

Two weeks before admission she had abdominal pain. The patient and her relatives both described this pain as intense in severity and centered in the right upper quadrant of the abdomen. The pain lasted for hours at a time. There was no radiation of the pain to the back or to the left upper quadrant. Food did not aggravate the pain, and food, soda or bowel movements did not relieve the pain. There was no history of melena, vomiting or hematemesis. She gave a history of a weight gain of 15 pounds during the late winter.

The patient denied any alcoholic intake. There were no relatives with a problem of jaundice or with gallbladder disease. She had been able to carry on her work as a seamstress until February 20, 1959.

Physical Examination.—The patient appeared to be in no acute distress. She was oriented as to time and place but gave a history lacking in detail and appeared to think slowly. Mild icterus was noted. The blood pressure was 120/70 mm. Hg. The pulse was 96 per minute. Examination of the fundi, neck, chest, breasts and heart were considered within normal limits. She had moderate obesity. She had an estimated 3 plus epigastric and right upper quadrant tenderness. Shifting dullness of the abdomen was not elicited. No masses were palpable in the abdomen. The remainder of the examination was not remarkable.

Laboratory Data.—The urinalysis was normal. Her hemoglobin was 11.2 gm. per cent and the hematocrit was 33 per cent. The WBC was 4,900 per cu. mm. Target cells were prominent on the peripheral smear. The serum VDRL was weakly positive. Liver function tests were as follows: bilirubin 6.5 mg. per cent with the direct component 4.8 mg. per cent; alkaline phosphatase 10.8 KAU; transaminase 280 units; prothrombin time of 24.3 seconds with a control of 12.5 seconds; total protein 7.2 gm. per cent with globulin 5.4 gm. per cent; total cholesterol 85 mg. per cent. The total serum bilirubin on March 30 was 5 mg. per cent with 4.4 mg. per cent direct component. Repeat prothrombin time was 21 seconds. Venous pressure was 122 mm. water and circulation time was 15 seconds. An electrocardiogram was normal. Electrolytes, blood urea nitrogen and fasting blood sugar were normal. A chest x-ray disclosed moderate generalized cardiac enlargement and prominent pulmonary vessels. A flat plate of the abdomen revealed considerable gas and fecal material in the colon, plus opaque medication in each buttock. The gallbladder was not visualized on a cholecystogram. A gastrointestinal series was normal except for an extrinsic deformity on the lesser curvature of the post-bulbar duodenum. This was interpreted as an enlarged gallbladder or enlarged liver.

Hospital Course.—On March 30 an estimated 2 plus ankle edema was noted. Hykinone, 5 mg. I.M., b.i.d. for three days did not alter the prothrombin time of 21 seconds. An exploratory celiotomy was done April 2, 1959.

During the operation an estimated 1600 cc. of ascitic fluid was found and removed. The gallbladder was examined and the common duct explored, both of which were found to be normal. The pancreas was palpated. A mass estimated as 3 by 3 cm. was found in the head of the pancreas. The liver was small and markedly nodular. A liver biopsy was performed and the frozen section report was cirrhosis with much scar tissue between lobules of the liver with many proliferating bile ducts. A biopsy of the pancreas was done but not a frozen section. Cholecystojejunostomy and jejunostomy were then performed. The paraffin sections of the biopsies were reported as post-hepatitic cirrhosis and normal pancreas.

The first postoperative day passed without complication. She received 3000 cc. of 10 per cent glucose in water daily with added saline, potassium and vitamins as needed. She received achromycin, penicillin and streptomycin antibiotics. She received Demoral, 50 mg. p.r.n. for pain. On the fourth postoperative day she was placed on a soft diet. She was ambulatory. However, she continued to drain copious amounts of serous fluid from the abdominal wound. She was given a unit of blood on the sixth postoperative day because her serum albumin remained low—1.5 gm. The next two days the patient was more sleepy, vomited several times and complained of right upper quadrant pain. The total bilirubin on the seventh postoperative day was 11.2 mg. per cent with 6.9 direct and 4.3 indirect bilirubin. A Levine tube was again passed on the eighth postoperative day and intravenous fluids restarted with glucose, saline and potassium chloride. A blood urea nitrogen of 72 mg. per cent was reported on the tenth postoperative day. The large amount of serous fluid drainage from the abdomen continued. On the thirteenth postoperative day the patient was again started on oral fluids. She complained of dyspnea on this date. Electrolytes reported were bicarbonate 23 mEq/L, chloride 96.1 mEq/L, sodium 121 mEq/L, and potassium 6.7 mEq/L. The blood urea nitrogen was 60 mg. per cent. Total serum bilirubin was 3.9 mg. per cent. On the fourteenth postoperative day the patient was more lethargic. Electrolytes reported included bicarbonate 22 mEq/L, chloride 89.9 mEq/L, sodium 112.5 mEq/L, and potassium 6.8 mEq/L. On the fifteenth day she became more dyspneic and bilateral posterior rales were heard on auscultation. She was placed in a sitting position, given intravenous aminophilline, Cedilanid and nasal oxygen; several hours later the dyspnea and rales had disappeared. Electrolytes this day were bicarbonate 16 mEq/L, chloride 84.5 mEq/L, sodium 109 mEq/L, and potassium 5.5 mEq/L. An additoinal 500 cc. 5 per cent saline and 1000 cc. normal saline plus Levophed were added to the intravenous fluids that evening. The patient was again dyspneic the morning of the sixteenth postoperative day. The respirations were rapid and moderately deep. Numerous moist rales were heard throughout the posterior lung field. The bicarbonate at 11 a.m. was 8 mEq/L. This followed electrolytes drawn at 8 a.m. which were bicarbonate 10 mEq/L, chloride 125.1 mEq/L, sodium 128 mEq/L and potassium 6.7 mEq/L. Additional therapeutic efforts with intravenous Solu-Cortef, M/6 sodium-lactate solution, sodium bicarbonate, and morphine were added but the patient died at 10:45 p.m. on the sixteenth postoperative day and the twenty-third hospital day.

Dr. C. Thorpe Ray: The medical problem in this case is one of a 56 year old lady who had experienced lower abdominal complaints for 20 years. Six years ago she had epigastric pain, nausea and fatty food intolerance with a "nonfunctioning" gallbladder. One and one half years prior to admission she had another episode of epigastric pain associated with fever and some questionable abnormality on cholecystogram. Up to this point the history is compatible with cholecystitis and cholelithiasis.

Seven weeks prior to admission she had an episode of jaundice, dark urine and light stools. There was some suggestion of an abnormality in the blood clotting mechanism as evidenced by a severe nasal hemorrhage. So far the clinical data are still consistent with cholelithiasis. I suspect that the degree of jaundice was not so variable as the protocol would lead one to believe. Jaundice of varying degree can occur with common duct stone, carcinoma of the bile ducts and carcinoma of the ampulla.

The pain was described as severe. We are not informed as to the nature of the pain or whether it was intermittent or constant. It did not radiate however. Pain is a difficult symptom to evaluate in many instances. The clinician is at the mercy of the historian unless there is a clear discrepancy between behavior and the intensity of pain as described.

On examination she was noted to be in no acute distress, mildly icteric. Right upper quadrant tenderness was present.

The laboratory data are more informative than the physical examination. The blood count was normal. Serum bilirubin was elevated on two occasions with a high direct-reacting component. The alkaline phosphatase was only slightly elevated. These findings are still compatible with obstructive jaundice. However, additional laboratory data indicate extremely poor hepatocellular function.

The albumin was quite low—1.8 gm. per cent. The cholesterol was low and the prothrombin time prolonged. Furthermore, there was no response to the administration of Hykinone.

Up to this point there is "historical" evidence of obstructive jaundice with some compatible laboratory data. However, the most impressive finding is that of extremely poor hepatocellular function which seems entirely out of proportion to the amount of obstruction suggested.

I am then given a good deal of help by the information in the protocol—probably too much. At operation the gallbladder and bile ducts were normal. This excludes cholecystitis, cholelithiasis and obstruction of the common duct. Carcinoma of the head of the pancreas is quite unlikely as is carcinoma of the ampulla since the gallbladder was not dilated. The pancreas was thought to be nodular but the biopsy was normal. Liver biopsy revealed a post-hepatitic cirrhosis. Without getting into a controversy over nomenclature, I would suggest that cholangio-hepatitis might be a good term. One does not get cirrhosis without necrosis.

I am not sure what I am to "suspect" from this point on. The patient had proved cirrhosis and laboratory data compatible with poor hepatocellular function. The high direct bilirubin is quite easily explainable by disruption of cholangioles. Since I am satisfied with the diagnosis as being entirely adequate to explain everything up to this point, I will suspect no additional diagnosis. The severe pain is left unexplained and I shall be content to discount some of the history in this regard.

Following operation the patient seemed to deteriorate in a number of ways. Hepatocellular function probably decreased even further. She had serious disturbance in acid-base balance and in renal function. Hyperkalemia occurred and may have been quite important in initiating or aggravating the heart failure. Dilution hyponatremia occurred and attempts at correction resulted in severe hyperchloremic acidosis. Certainly she had enough things go wrong to cause her death. Patients of this category often have bronchopneumonia terminally.

Major Diagnoses: 1. Cholangio-hepatitis with cirrhosis. 2. Hepatic failure.

Dr. Hugh E. Stephenson, Jr.: This 56 year old lady was admitted to the surgical service as a referral from a doctor in a neighboring town. The referring physician was quite concerned about this woman's diagnosis because tests in his hospital indicated considerable liver damage. The possibility of a pancreatic or duodenal neoplasm was considered although it was his belief, as it was ours, that this patient probably had an obstructive jaundice due to common duct lithiasis. She had had at least three episodes of jaundice during the last six years and had suffered from right upper quadrant pain for at least twenty years. In addition, previous cholecystograms had indicated that the gallbladder was diseased. There had been no weight loss. She did complain of itching.

The patient was studied on the surgical service for ten days during which time she was seen on repeated occasions by the medical consultant who, like ourselves, felt that her most likely problem was that of a common duct stone although his concern about secondary liver damage was considerable.

After having been transfused once and having had repeated injections of vitamin K, she was operated upon ten days following admission. Weighing the relative merits of exploration pro and con, it was the general impression that an exploration would probably reveal a "ball valve" stone in the common duct. As mentioned in the protocol, there was considerable ascites present and a markedly cirrhotic liver was found. No evidence of stones in the biliary tree was found. Not mentioned in the protocol was the fact that a duodenostomy was performed in the second and third portions of the duodenum and the ampulla of Vater located. The sphincter of Oddi was dilated mechanically.

The problem of differentiating extra-hepatic biliary obstruction from intra-hepatic obstruction is not always as easy as we would like for it to be and there may be considerable overlapping in the findings in the two conditions. Here is a case in which it would seem wiser to refrain from an exploration although, I must confess that better means of differentiating the two conditions would be of great benefit.

Dr. Joseph E. Flynn: This patient had post-hepatitic cirrhosis. This disease is usually considered a rare complication of viral hepatitis since it occurs in only 0.7 per cent of all cases. In most instances viral hepatitis heals because the damage involves only part of the liver lobule. When the growth of the virus ceases, the surviving liver cells then proliferate and ultimately produce a perfect restoration of the normal hepatic architecture.

In some cases, however, there is extensive necrosis involving the major portion of a number of lobules. As a result regeneration may be incomplete. Furthermore, since all of the cells of some lobules are destroyed, there is progressive collagenation of the collapsed reticular framework of the destroyed lobules. This results in the formation of broad bands of connective tissue

Clinically, post-hepatitic cirrhosis is almost always characterized by progressive liver insufficiency. A number of explanations have been offered to explain the increasing abnormality of liver functions. Some have said the hepatitis smolders along with continued destruction of the liver cells. Others have attributed the progressive insufficiency to a decreasing vascularity secondary to increasing contraction of the scar tissue. Another possibility, but one by no means widely accepted, concerns an interference with physiologic regeneration of the liver cells because of decreased blood supply.

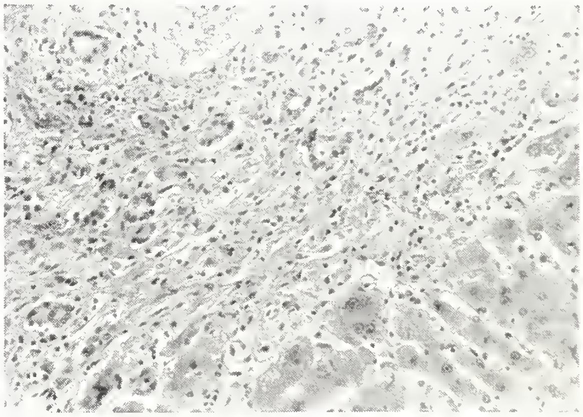

Fig. 1. Photomicrograph of the liver. Here almost all of the liver is replaced by scarring. Proliferating biliary ductal epithelium can be seen within the scarred tissue. At the right lower corner regenerating liver tissue is present. x 150.

At autopsy the most striking finding was the marked deformity of the liver and its small size. The liver weighed only one third as much as normally and both lobes consisted of several irregular large nodules. The gross appearance of the liver was compatible with a hepar lobatum and the patient did have a slightly positive VDRL. Microscopically, however, there was no evidence of gumma formation. Instead, the changes were compatible with a post-hepatic cirrhosis (figs. 1 and 2). In much of the parenchyma there were broad bands of fibrosis in which the lobules were completely destroyed. In other instances the lobules were subdivided into smaller units resembling the changes diagrammatically illustrated in figure 2. At the periphery of the scarring there was a variable degree of degeneration. Cells were basophilic with multiple nuclei. Other findings included a cystic hyperplasia of the endometrium (fig. 3) and hyperplasia of the breast (fig. 4). These are fairly common findings in cirrhosis, particularly in younger patients and are thought to be due to a failure of the damaged liver to inactivate estrogen. There was marked atelectasis of the right and left lower lobes. The autopsy diagnoses were as follows:

Severe post-hepatic cirrhosis.
Ascites.
Cholecysto-enterostomy.
Entero-enterostomy.
Atelectasis, right and left lower lobes.
Pleuritis, old, healed.
Hyperplasia, cystic, endometrium.
Hyperplasia, breast.

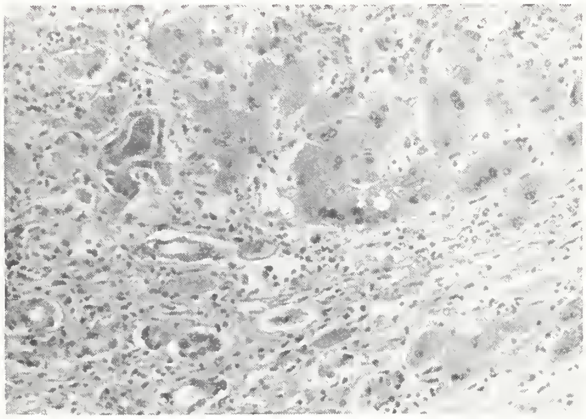

Fig. 2. Photomicrograph of the liver. The upper half of the photograph consists of regenerating liver tissue; the lower half is scar tissue with proliferating biliary ductal epithelium. x 400.

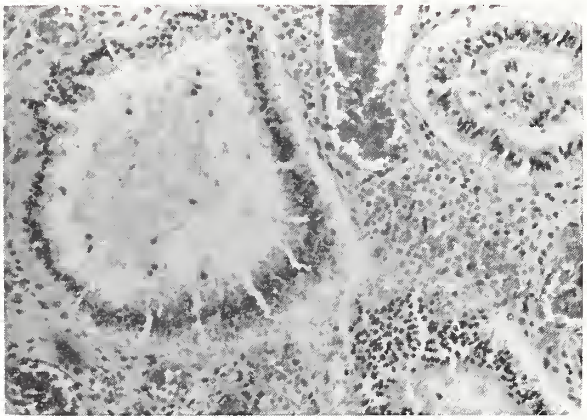

Fig. 3. Photomicrograph of the hyperplastic, hemorrhagic endometrium.

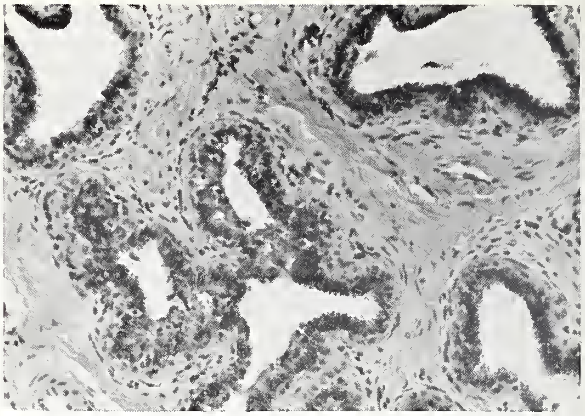

Fig. 4. Photomicrograph of the breast tissue. There is marked proliferation of the ductal epithelium. x 400.

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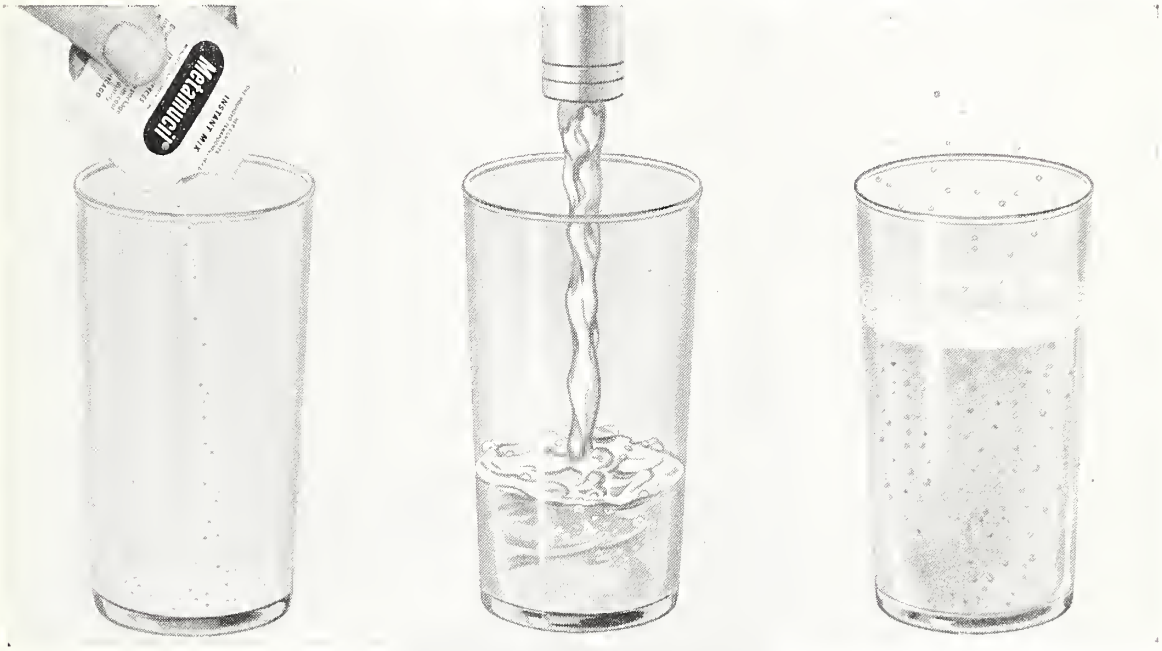

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The University of Missouri School of Medicine

A Special Article

The University of Missouri Medical Center is discussed, giving a history in brief and outlining its present work and administration together with its cooperation with other schools in the University. The future needs and hopes for the school are expressed, not only for the school itself but for better health in the state.

Dr. Wilson is Dean and Director of the University of Missouri School of Medicine. Dr. Wilson assumed his duties at the University of Missouri on November 1, 1959. He came to Missouri from the University of Kansas School of Medicine.

It is with considerable pleasure and even greater humility that I have accepted the invitation of the Missouri State Medical Association to prepare this report on the Medical School. There are many of you who are much better informed concerning its past, present and in some instances, plans for the future than myself. To you I would apologize for stating the obvious. Perhaps even in such instances a simple statement of obvious facts will establish a baseline upon which all can profitably and effectively work toward the betterment of health care within the State of Missouri.

A personal note of thanks is in order to the many members of the medical profession, University faculty members, various state agencies and cooperating community organizations who have given so generously of their time and effort to make the Wilson family feel at home in its new environment and to provide an objective background for planning the future course of the Medical Center. To each of you I owe a great debt of gratitude and sincerely hope that performance in subsequent years will justify your confidence.

The objectives of a medical school can be quite simply stated but as in most such instances are of course not quite so simply accomplished. It is our belief along with those of you who were instrumental in establishing a four year medical school within the University of Missouri that we are an agent of the state with very clear-cut objectives. The ultimate objective is, of course, to improve the health care available to each and every individual within the state insofar as that is possible. In order to accomplish this, the Medical School first has the responsibility of selecting those students who seem best qualified to render the highest type of personal and dedicated care to their prospective patients.

We believe that no single person, agency or group of individuals can by isolated effort accomplish permanent improvement of patient services. Such improvement is inevitably the result of the combined efforts of all interested citizens including those who are trained and prepared to render special care as well as those interested community groups who provide the setting and the encouragement within which such care can occur. In addition, if a medical school is to produce the type of intellectually inquisitive physician who will be alert to each new development in the field of medicine, it should and must be active in the seeking out and the production of new health information. Finally if it is not to be a parasite upon the other health education institutions of the country, a small number of each group of graduates must be interested in and dedicated to the educational process along with its research responsibilities.

There is little doubt but that the future of the University of Missouri Medical Center and its School of Medicine is completely interwoven into the health needs of rural Missouri, and for this reason our special emphasis must be placed upon contributions to the solution of health problems for rural communities.

HISTORY

For those like myself who have been more recently introduced to the state, a brief review of the history of the School of Medicine in the University of Missouri is in order. Dr. Joseph Nash McDowell, cousin of Dr. Ephraim McDowell known to students of the history of medicine, founded a medical department of Kemper College in St. Louis in 1840 known as the McDowell Medical College. This college formed a close affiliation with the University of Missouri in 1845 and that relationship existed until 1856 when it was dissolved because of political opposition. McDowell Medical College continued independently, being subsequently named Missouri Medical College. In 1886 Missouri Medical College again affiliated with the University for a four-year period. It later became the Medical College of Washington University.

In 1873 the University established a two-year medical school on the campus at Columbia. In 1891 the curriculum was extended to three years and in 1899 to four years. In 1909, however, the last two years were discontinued because of financial difficulties. From 1910 to 1955 the University operated a two-year medical school. The hope of returning to a four year course within the school, however, had never been lost and in 1930 the Board of Curators voted to reestablish the full four year course. At that time a clinic was established and arrangements were made with nearby hospitals for the teaching of clinical subjects. One class was given the third year of work in 1931-32 but due to the depression the effort was then discontinued.

In 1951 the legislature of Missouri appropriated money to enable the University of Missouri to again undertake a full four year teaching program in the School of Medicine. Additional appropriations were given to the University in 1953. The present new physical facilities were completed and occupied in September 1956 and on June 8, 1957, graduation exercises took place granting the M.D. degree for the first time since 1908. This move upon the part of the citizens of the State of Missouri and the University anticipated the present great concern over the increasing disproportion between health needs and available physicians. This has perhaps been most clearly pointed out in the recent Bane report made to the Surgeon General and entitled "Physicians for a Growing America." There can be little doubt that the rapidly expanding population and the increasing number of technics which are available for the practice of medicine call for immediate and urgent action if each citizen is to receive his fair share of the benefits now or soon to be available in health care. We can well afford to be proud of the fact that the State of Missouri has taken this advanced look at health needs and has expressed its response to this concern in such an appropriate manner.

PRESENT PHYSICAL FACILITIES

The Medical Center is located on the south end of the University campus. It is composed of three basic structures. A four level Medical Science Building, wisely constructed to allow an expansion of three additional floors when appropriate, furnishes approximately 129,000 square feet of floor space for the basic science departments and the School of Nursing. The hospital is directly attached to the Medical Science Building and furnishes 441 beds, 28 bassinets, outpatient and emergency care facilities and a modest number of clinical research laboratories. It likewise includes an 18 bed inpatient psychiatric unit, an adequate physical therapy area and the other necessary ancillary services. McHenry Hall, a dormitory for nurses can accommodate 105 students and is connected to the hospital by an all weather tunnel.

EDUCATION

For the purposes of this report, the Medical Center responsibilities will be simplified by dividing them into three broad categories—education, research and service. This is an artificial division since each of these activities is an integral part of the other.

The central theme of a University Medical Center is and must be education. To provide a clarity of purpose and effectiveness in planning, each endeavor of the Medical Center must, therefore, be weighed according to the contribution which it can make to the education of the young individuals who have been entrusted to it. This in no way deemphasizes the tremendous importance of research and service and in fact, once the perspective has been established around the educational program, there is no way in which a good health education program can be provided without at the same time having research and service programs of equally high quality.

In a given year approximately 1,400 students receive all or a part of their instruction in the Medical Center. This includes 266 medical students, 31 residents and interns, 38 students in graduate school, 202 nursing students, five students in medical technology, 52 licensed practical nurses and 775 undergraduate students taking basic science courses for credit toward degrees in other schools and colleges of the University. There are in addition students in social work, psychology and School of Education programs who receive appropriate clinical experience in the Medical Center as a part of their education.

The medical faculty which is still at part strength includes 62 full-time members who serve to give instruction in the basic science and clinical departments. Basic science departments are five in number including Anatomy, Biochemistry, Microbiology, Pathology and Physiology-Pharmacology. The clinical departments include the following: Department of Internal Medicine with special services in cardiology, dermatology, general medicine, hematology, infectious disease and neurology; Obstetrics and Gynecology; Department of Pediatrics which has faculty members specializing in allergy, cardiology, endocrine disorders, hematology, infectious diseases and nutrition; Department of Preventive Medicine whose chairman likewise serves as the director of the Crippled Children's program; Department of Psychiatry which is just acquiring its full-time staff; Department of Surgery with sections in Anesthesiology, General Surgery including cardiac and thoracic surgery, Neurosurgery, Ophthalmology, Orthopaedic Surgery and Urology (recruitment is underway for faculty members in plastic surgery and otorhinolaryngology); and Radiology which furnishes diagnostic and therapeutic radiology including the use of isotope facilities.

One of the important programs in undergraduate medical education has been the preceptorship program. This has been maintained to the present time through the dedicated efforts of volunteer members of the profession throughout the state and is an evidence of their deep concern with the problems of medical education. The preceptorship presents a unique opportunity for the medical student to see medicine as it is practiced in a community where the needs and desires of the patient as well as the needs and desires of the community are paramount and where the physician is only one part of the total organization. This is a type of medical setting not available in large medical centers and hospitals. In addition it gives the student firsthand information concerning the practice of family medicine or general practice as it is usually called and in no small number of instances gives to the student the inspiration to pursue this type of practice due to the fine example which has been set by his preceptor. Equally important, those who are totally unsuited for general practice have an opportunity to discover this early in their professional education.

A great amount of time and effort will be spent in the development of the preceptorship program and the setting of standards within it which are consistent with the best in medical education. It is difficult to refrain from the facetious observation that by one simple device it would be possible to double the number of individuals who practice in rural towns. One would need only to have the privilege of selecting for the student a wife who preferred small communities.

Graduate Medical Education.—Straight internships are available in internal medicine, pathology and pediatrics. Approved residencies are available in pathology and all of the major clinical disciplines. The general practice residency program is being reactivated.

Postgraduate Medicine.—In cooperation with the Missouri State Medical Association and the Academy of General Practice, an active postgraduate program has been carried on. The chief emphasis to date has been on the provision of a speakers' bureau at the Medical Center. During the last year 48 presentations, each of which included from one to three faculty members, were made to medical groups throughout the state. A grant has been made available to the school which will allow procurement of outstanding speakers from other areas to come to Missouri to participate in this program.

One refresher course, the annual spring conference, has been given each year. In 1960-61 two refresher courses will be given with the ultimate goal for subsequent years being at least one such refresher course during each calendar month of the school year.

School of Nursing.—The School of Nursing has been organized within the School of Medicine. A separate report from the Director of the School of Nursing has been included elsewhere in this issue. The increasing importance of nursing care as a component part of improved medical standards makes this one of the most important programs in the Medical Center. There can be no doubt but that the role of nursing care in the future will be considerably expanded and that closely interknit educational programs between medicine and nursing will become even more important than they are at present.

Medical Technology.—Students in medical technology are instructed under the auspices of the Department of Pathology in the School of Medicine. Much of their basic work is received in the College of Liberal Arts on the University campus, but the final year of their program is presented in the Medical Center. Increasing dependence upon laboratory results in highly refined diagnostic procedures makes this, too, an integral part of the educational program in a health center.

Physical and Occupational Therapy.—Although the Medical Center does have the services of physical therapists available, it has not as yet brought in a physiatrist. The training of physical therapists will need to await the arrival of such a person. In all probability the training of individuals in occupational therapy will likewise need to await such an addition to the staff. Excellent physical facilities are available for a teaching program in physical therapy and active negotiations are now being conducted with candidates who might be interested in coming to the Medical Center to conduct this program.

X-Ray Technology.—Plans have likewise been drawn up and are under consideration for the training of x-ray technologists. The Medical Center is fortunate in having on its staff one of the nationally active and progressive leaders in x-ray technology and it is hoped that this program will take concrete form in the near future.

Cooperative Programs

Social Work.—The School of Social Work of the University cooperates with the Social Service Department within the Medical Center to provide training for students in social work in the medical aspects of their field. Concurrently this program renders vitally needed service to the patients of the Medical Center. The graduates of these programs are in short supply throughout the state and are quite important for the improvement of health services in the small communities and less well developed areas in the state.

Licensed Practical Nursing.—The public school system of Columbia has sponsored a training program for licensed practical nurses and the Medical Center has cooperated through its Nursing Service Department and through the School of Nursing to provide practical experience for these students following their basic preparation in didactic material. As the responsibilities of the degree nurse are constantly increased, medical centers, hospitals and nursing homes throughout the country are becoming increasingly dependent upon the licensed practical nurses to render necessary bedside care. There is every indication that these responsibilities will continue to increase in the foreseeable future.

Psychology.—The Department of Psychiatry will soon be actively involved in providing clinical experience for students from the Department of Psychology of the University. The by-product of service to patients in the Medical Center will be of great value. This is another evidence of the great mutual advantage which arises from having the Medical School upon the University campus.

Research

Because the primary responsibility of the Medical School was to first establish its educational programs and since there was no way to defer the discharge of service responsibilities as they related to patient care, the research program at the Medical Center has only recently begun to expand in accord with the long range goals of the faculty. As mentioned earlier in this article, any vital educational program can remain current and challenging to faculty and student alike only if it makes its own contribution to the total available fund of medical information. A program which does less than this is primarily a training rather than an educational program and faculty of the caliber necessary to provide the best in medical education cannot be recruited into such a program. Research is and must remain secondary to the educational goals of a University Medical Center but is at the same time an essential part of those goals. It is the hope of the faculty of the School of Medicine that research activities can be developed to the point at which the expenditure of time and effort in their behalf will be equivalent to that which is expended directly in the educational program itself. Fortunately granting agencies are willing to provide the money needed for the research projects themselves and recently some have indicated a willingness to support the investigator as well as his staff. Monies are likewise available on a matching basis for the construction of the facilities within which such research takes place. This support of research by granting agencies we believe to be an evidence of the fact that new knowledge as it is produced is not purely a local or state responsibility nor is it entirely of local or state benefit but has rather a national and international impact.

With the advent of modern communication and travel, any new advance in health care is almost immediately of benefit to people throughout the world. As such we believe it to be proper that this support be in a large part derived from volunteer and national organizations which have an interest in serving the population in general. Quite as obviously the state has some responsibilities in this regard and it is our belief that these are discharged through the medium of providing the basic staff and some key funds for initial development of new areas of investigation. The research productivity of the staff of the Medical Center is already of national note and there is every reason to believe that it will continue to increase its contributions in number and size during the forthcoming years until the research program has reached that level of development which seems proper in an educational institution.

Service

It is a truism to repeat that there can be no good medical education without concurrently rendering the best in medical service. The State of Missouri has provided the Medical Center with fine modern facilities and equipment with which to render this service. At the present time 844 staff members serve in the Medical Center for the purpose of rendering patient care. Unfortunately, due to lack of sufficient operating funds, not all of the hospital beds have been placed into use to the present time. With the opening of the psychiatric wing during the summer months, this will leave only the sixth floor of the hospital unopened which comprises 113 additional beds. It is planned to place these into operation during the fall and winter months of the coming year and, in fact, there are now waiting lists for services within the Medical Center which make it imperative that this be done with the utmost haste.

During the first six months of the current year there were 2,563 admissions to the hospital excluding newborn infants and 15,990 visits to the outpatient clinic. Approximately 30 additional beds were opened during this period of time; consequently, the last six months of this year will show an even greater increase in activity. In order to adequately teach the full class of 100 medical students eventually planned for the Medical School, it will be necessary to have approximately 60,000 outpatient visits per year and a minimum of 10,000 admissions to the University Hospital in the course of a year. Other hospital affiliations will also be necessary to provide an additional 5,000 patient admissions. Such requirements are based upon standards established by the Association of American Medical Colleges and the A.M.A. and are related to the number of new patients which each student must see in the course of his education if he is to have an adequate range of experience in rendering medical care. It is our belief that this is not an unrealistic goal for the Medical Center although we are quite dependent upon the referring physicians in the state for such a volume of patient visits.

The members of the faculty of the Medical Center act as consultants for the referring physicians of the State of Missouri. In all instances, except for emergency care or under special arrangements with the practicing profession designed to meet local health problems, patients are only accepted following a request by the family physician or in the absence of such, another licensed physician who can serve the needs of the patient. All information and reports are sent back to referring physicians following discharge of the patient from the Medical Center Hospital. The administration has been made acutely aware of the necessity of prompt communication with referring physicians both at the time of admission as well as discharge and active steps are being taken to facilitate these services. Suggestions from the practicing profession for improvement of these activities are solicited.

Active discussion has been initiated by the State Division of Welfare, the Division of Vocational Rehabilitation, and the Bureau of the Blind concerning the applicability of the above procedures to the care of the indigent and the blind. If modification of these procedures are developed for the benefit of special groups, these will be worked out in harmony with appropriate representatives of the Missouri State Medical Association.

State appropriations for the operation of the Medical Center will provide about 75 per cent of the total operating costs during the current year. Student fees provide some additional revenue but it is necessary that the Medical Center care for some patients who can assume a part or total responsibility for the cost of their medical care. It is probably unrealistic to expect the state to meet the total cost of care for all patients necessary in the educational program and equally unfair to deny the available services of the Medical Center to physicians and patients simply because the patient *can* afford to pay for them. This is a problem which will be worked out in concert with the Council of the Missouri State Medical Association and its parent organization.

It is quite clear that medically indigent patient care is and must remain the primary concern of the University Medical Center, so long as such care makes a contribution to the educational program. At the same time adequate training of young physicians requires that they participate in giving care to all classes of patients if they are to best serve the needs of the communities in Missouri. To this end we would appreciate the opportunity to be of service to physicians and their patients both indigent and private whenever our staff and facilities can be of assistance. Here again the faculty of the School of Medicine in the University solicits the help and support of the practicing physicians of the state as they work toward mutually desirable and acceptable goals.

GOALS FOR THE FUTURE

There can be no doubt but that the author in this instance has had far too short an experience in the state and in the School of Medicine to be able to understand or outline the comprehensive goals for the University and its Medical School. It is, however, equally certain that little progress is made without the establishment of goals which are at least tentative in nature and which provide a framework upon which activities can be undertaken. Goals so established must inevitably be altered and molded with the advent of additional experience, information and helpful advice from everyone interested in the program. It is in this spirit that a number of rather general goals are presented here as topics of discussion. It is to be hoped they will be of interest to the reader and will stimulate his further participation in planning for the intelligent growth of the Medical Center program.

Perhaps of first and greatest importance is the need for a complete mutual understanding between the practicing profession within the state and their Medical School. Without the medical schools of the country, there could be no future for the practice of medicine as we now understand it since the Medical School is the source of the physicians. Concurrently without the benefit of the advice and experience of the physicians along with their active support of the educational and service programs of the Medical School, it must unavoidably decline and eventually be discontinued. There is no one in the field of health care who has not considered these matters at one time in his professional life. Unless, however, these principles are repeated and are acted upon at every opportunity they are apt to be forgotten in the press of the solution of day to day problems. With this in mind, it would seem to me that it is of prime importance both to the Medical Association and to the Medical Center that this basic fact be reviewed each time major problems are brought up which require mutual consideration.

The greatest reward to any medical educator comes from the knowledge that he has made a significant contribution to the health care of his community, state or nation through more adequate preparation of the graduates who have been under his care. This is a pride which we believe is shared by the practicing profession as they see these able young men join their forces and bring ever increasing vigor and vitality to the practice of medicine.

Recruitment of Students.—No medical school can produce graduates of a higher caliber than those who are admitted to the school. The decrease in numbers of top level students, measured by academic standards, to medical schools has been of considerable concern to medical educators and to the practicing profession. This is under intensive study by the A.M.A. and the Association of American Medical Colleges and should be of particular concern in the State of Missouri since the percentage of recruitment in this state of high school students for the field of medicine is below the national average both in quality and in quantity. A large number of factors are no doubt at work, some of which are not as yet obvious. A few of the obvious problems do bear discussion at this point.

First and perhaps most important, recruiting begins with students in high school and in college when the only available advisor in health matters is usually either a high school career advisor or the local practitioner. If each of the practitioners in the State of Missouri were to accept as his own personal responsibility the necessity for recruiting new and able physicians with the same degree of intensity and thoroughness which has been evidenced by many groups as they have looked for football players, the number of applications from well qualified students would in all probability double in a short period of time. This would appear to be a small investment of time and effort for the attendant rewards in improved quality of future colleagues and improved quality and quantity of medical care.

The faculty of the Medical School has been and will continue to be increasingly active in responding to requests for information and in attempting to carry information on medical education to any interested school or individual. In the final analysis, however, our numbers are too small and our contacts too limited to make this a practical solution. Only those physicians involved in the day to day life of the communities can solve this problem in a completely satisfactory manner.

Another of the deterents in recruitment for medical education even after an individual has selected this as his preferred field has been the length of the medical education program and the financial burdens attendant upon such a long stay in the University. It has been adequately proven in other schools that much of this handicap can be removed by the simple provision of loan funds made freely available to the medical student. Such funds should be established on terms consistent with the need of the student which means that the interest rate should be low or nonexistent, that the repayment should be based upon the student's entry into the practice of medicine rather than upon any particular time limit and that the amounts loaned should be adequate to allow him to maintain a relatively normal standard of living for himself and often for his wife and family. It is my belief that the needs of medical students at the University of Missouri will in all probability dictate a revolving loan fund of this sort in the amount of approximately $500,000 with additional funds needed if such privileges are to be extended to those individuals taking advanced training and to other students within the Medical Center. This is an unfair drain to place on funds now available to the University and one which will need to be met by individuals interested in the health profession. Often, if this is known, wills and trusts can be established by interested citizens who wish to further the needs of medical care. Experience with loan funds which have been so established has been phenomenally good and the collection rate upon these loans, even though given on a relatively free basis, are the envy of the investment people of any bank. In another medical school which had such a loan fund in existence, it was noted by the University and its alumni group that the most grateful and active people in the alumni organization were not those who had received scholarships or gifts but were those who had been given the loan of money at a time when they needed it, in accord with their own demands and in the absence of embarrassing restrictions. Many of the recipients of these loans have in turn made contributions to loan funds at later dates. Such a system has an advantage over the scholarship program in that it acts as a revolving pool of funds which once established allows the students to help each other rather than requiring continued contributions from outside sources.

The faculty of the School of Medicine is of course working actively in the design of the medical education programs which will be most stimulating and most interesting to the medical student after he has entered Medical School. We cannot hope to attract and challenge the best of our young individuals unless they come to a faculty and educational environment which is stimulating and challenging to them. We must be prepared to allow growth of these young individuals in any of several appropriate directions which they may choose. Concurrently it is necessary to have those competent individuals within the faculty who can provide leadership and constructive criticism of the highest order for the student body. This holds true in all of the fields of education, service and research.

In the final analysis, a medical school has the responsibility of accepting college graduates who are accustomed to having their academic responsibilities carefully delineated for them. It is the task of the faculty to develop such a person into one who thoroughly knows his own limitations, is completely able to seek out new information when that becomes necessary and is motivated to continue his own self improvement throughout his professional life. It is probably relatively unimportant how much an individual knows at the time he leaves medical school, although there are certainly minimal standards in this regard. It is important that he have a thorough understanding of his own limitations and a complete dedication to the continued acquisition of new information. It is no secret to those who are in the practice of medicine that the greater part of a good medical education takes place after graduation from medical school.

Cooperative Programs With Other Branches of the University.—One of the great advantages in having a medical school located upon the University campus is derived from the fact that all of the resources of a great educational institution are available for advice, counsel and, at times, direct participation in the improvement of health, education and care. This potential has only been briefly explored as yet and provides exciting new possibilities which we believe will add much to the promise of the University of Missouri Medical Center. A few selected illustrations follow as examples of the potential value of this association. The School of Veterinary Medicine is a case in point since animals have been found to be one of the important reservoirs of disease. The College of Agriculture obviously has tremendous resources and facilities for the study of nutrition, nutritional problems, as well as direct supporting activities in the field of research. The Departments of Psychology and of Social Work have already been mentioned and obviously the Department of Home Economics has interests which are integral with those in dietetics in a Medical Center.

The availability of courses of a general educational nature for students who have chosen to go into the health professions may often make the difference in reaching the talented candidate or losing his interest. Hopefully, thought may be given toward cooperative and new types of educational programs designed to improve quality and quantity of content and possibly at some future date to reduce the length of time necessary for the attainment of the M.D. degree. These possibilities with many others yet unmentioned and not yet thought of open the door to new and exciting educational and research programs in the best tradition of a great university.

Recruitment of Staff.—While the inherent qualities of the student are relatively unchanged by his medical experience, the degree of development of his potential is directly and completely dependent upon the caliber of the faculty who have assumed the responsibility for his education. Such faculty members must be interested in and dedicated to teaching in the finest sense of the Hippocratic Oath. Concurrently, they must be capable as a group of giving enlightened and aggressive leadership in patient care and health research. Particular emphasis is being placed upon the willingness of each new member to serve the health education needs of the total state through support of continuing education and other cooperative efforts. There are as yet a large number of unfilled faculty positions. A number of new faculty members will be joining the Medical Center within the near future, and it is our hope that we will be able to bring the staff to full strength within the next two years.

Research Facilities.—As the research program reaches maturity and as the cooperative programs between the Medical School and the other colleges and schools of the University continue to develop, there is little doubt but that the projected three floors of the Medical Science Building will become a necessity. Increasing sizes of the medical school classes themselves and increasing numbers of ancillary health training programs will likewise make this an imperative need in the near future. There is every reason to believe that there will be forthcoming help at the federal level for the construction of research facilities on a matching basis and that in all probability some funds will be available for the construction of medical school facilities on the same basis.

An experimental program is being conducted, using a temporary housing facility close to the Medical Center, to provide for the housing needs of indigent outpatients who do need the care provided in the outpatient department but who are not in the need of hospitalization. Such facilities reduce tremendously the cost of rendering this care to the patients and at the same time increase the number of patients who are available for the teaching program. Similar facilities are in use at the University of Iowa and at the University of Florida. It is conceivable that, if this trial is successful and results in the improved care of the patients who come to the Medical Center while concurrently reducing the cost of such care, a permanent facility might be requested in the future.

Ground Space.—It is important in the development of the Medical School, considering the tremendous investment which has been made in the present physical plant, that space be provided in the immediate vicinity upon which future institutions could be built. As the community grows and expands and as ancillary health organizations of local, state and national interest come into demand, many of these will, upon the provision of space alone, provide both their own building and their own support. If they are to be an integral part of the teaching program and if the Medical Center is to realize the full value and potential of its staff and facilities, it is important that provision be made whereby such new activities can be connected by all weather tunnels or be so closely adjacent that patients can be easily moved in any kind of weather from one facility to another. This would require a minimum of 35 acres of ground and would ideally encompass double that amount.

Budgetary Support.—The expenditures for the Medical Center during 1960-61 are projected to be $5,750,000. Approximately 75 per cent of this will be available from state appropriations, the balance from research grants and earnings. With a fully developed program the overall budget will ultimately need to be increased by at least 40 per cent. The cost of education will be fixed by the number of faculty members needed to adequately teach the students and will increase with increased enrollment. Increased research activity will be almost entirely self-supporting. The major increase in cost will be related to patient care as the hospital and clinic are placed in full operation. The cost per day of patient care is easily calculated and the University of Missouri costs compare quite favorably with those of university hospitals in the surrounding states.

The source of the increased budget is a matter of concern to everyone interested in medical education and health care for Missouri. In some university medical centers the earnings from the care of part-pay and full-pay patients is more than adequate to fill the need for hospital revenue described. The decision concerning availability of such resources is up to the practicing profession of the state and will depend upon their interest in medical education and the quality of care rendered in the Medical Center. If monies are not available from this source, they must inevitably arise from tax sources, or the educational services rendered must be reduced in number or quality. The latter alternative appears to be a poor objective for a program which has thus far been supported so effectively.

Cooperating Institutions.—The School of Medicine gratefully acknowledges the help which has been given by the Psychiatric Receiving Center of Kansas City and the St. Louis State Hospital in the teaching of psychiatry. Without this help we would have been badly handicapped. For fear of omitting someone, further attempts to mention institutions by name will not be made, but to each we extend our heartfelt thanks.

The Division of Health and the Division of Mental Disease have expressed a deep interest in working on mutually advantageous programs. The School of Medicine looks forward to increasing vigor in cooperative ventures with the Ellis Fischel Cancer Hospital and the Fulton State Hospital. It is hoped that the greater part of undergraduate teaching for medical students can be accomplished within or close to the community of Columbia. At the same time active discussions are going forward with institutions in other communities with the hope that one or two strong affiliations may be formed with hospitals interested in producing an academic program for residents and fellows. Such programs will be of great value to the University of Missouri, as well as being a source of considerable support for the affiliating institution. Every effort is being lent to an attempt to develop during the coming year such affiliations as would be in accord with the long range best interests of the educational program of the University.

SUMMARY

This has been a rather brief and certainly incomplete attempt to describe the present status of affairs at the University of Missouri Medical Center as seen by its Dean and Director. It must again be emphasized that some of these opinions and viewpoints will surely be modified through the advice of others and the experience of a longer duration of service. It is felt that they do present a reasonable point of departure for consideration of future plans and progress and are submitted with the hope that each one who reads them will feel this to be an invitation to lend his advice and counsel. In the final analysis the ultimate goal of every member of the health profession in the State remains the same, namely, that of the improvement of the welfare of the patient and the prevention of disease when and where possible. With the common bond thus shared with the practicing profession and the many other interested individuals and groups, the faculty of the School of Medicine and its administration view with considerable optimism the future of the growing program in the University Medical Center and the future of the health care of the citizens of the State of Missouri.

RUBY POTTER, R.N., Ed.D., *and*
JEAN HOFMANN, R.N., M.S., *Columbia*

The School of Nursing

At the University of Missouri

The history of the School of Nursing at the University of Missouri, its present status and curriculum and the planned future of the school are presented.

Miss Potter is Director of the School of Nursing and Mrs. Hofmann is Assistant Professor of Nursing at the University of Missouri, Columbia.

THE UNIVERSITY of Missouri School of Nursing was established by the Board of Curators to help meet the needs of the people of Missouri for nursing services, especially in the rural areas.

HISTORICAL DEVELOPMENT

The development of the School of Nursing parallels the changing concepts of the functions of nursing. The forerunner of the present School of Nursing—The Parker Memorial Hospital Training School for Nurses—was established just after the turn of the century, in 1901. Training in skills and procedures was emphasized in this early period, reflecting the then current concept of the function of nursing.

The University assumed responsibility for this school in 1920 when the Department of Nursing was created by the Board of Curators. Graduates of the three year combined curriculum of arts and science and nursing received sixty semester hours of credit toward the A.B. degree. This reflected the growing trend toward including preparation for nursing within the boundaries of the institutions of higher learning.[1]

In 1939 a program leading to the degree, Bachelor of Science in Nursing, was authorized under the School of Medicine. This milestone in the development of nursing education paralleled recognition of the achievement of professional status, according to the criteria established by Dr. Abraham Flexner. Official recognition of nursing as a profession was reflected in the reports by the Department of Labor in the same year.[2]

The impact of World War II was felt by the School of Nursing beginning with the inception of the Cadet Corps program. Students of nursing were eligible to participate in this program beginning in the fall of 1943 and until the end of the program. Inadequate clinical facilities led to the decision to admit no new student to the School of Nursing after 1945.

The University again assumed responsibility for education for nursing in 1949 when the School of Nursing (originally called Department of Nursing Education) was reestablished within the School of Medicine. With the opening of the Medical Center in 1956 facilities for teaching nursing in most of the clinical areas became available in Columbia.

The School of Nursing, as it exists today, is a professional school functioning within the general framework of the policies of the University of Missouri.

The Board of Curators of the University of Missouri has defined the University and declared its intents and purposes to be the following:

"Purposes of the State University: A true state university strives to be the intellectual, the cultural and the professional center of the state. . . . A true state university proposes to make available to the State all the intellectual and the cultural resources of that commonwealth.

"Activities of the State University: In order to fulfill the purposes of a true state university it has become necessary to develop the following types of activity within the University of Missouri: 1. Instruction. 2. Training. 3. Research. 4. Creative Endeavor. 5. Service."[3]

The Board of Curators of the University of Missouri has defined the purposes of the University Teaching Hospitals as:

"Said hospitals shall be maintained and operated for the purpose of teaching allopathic medicine, nursing, and allied healing arts in the University of Missouri and for conducting research in said fields, and incidental thereto and insofar as the same may be practical, to provide medical assistance for the residents of the State of Missouri."[4]

CURRENT PROGRAMS

Current curricular offerings reflect the contemporary concept of the function of nursing.

Two curricula leading to the degree Bachelor of Science in Nursing are offered: The Basic Professional Curriculum, established in 1950 and the Supplemental Curriculum for Graduate Nurses, established in 1951. In addition, a program of Continuing Education in Nursing including extension and off-campus courses and on-campus conferences is offered in cooperation with the Division of Continuing Education of the University.

BASIC PROFESSIONAL CURRICULUM

The basic professional curriculum is provided to enable young men and women interested in studying nursing to prepare for meeting the responsibilities of the graduate professional nurse: to render skillful, understanding nursing care; to carry out medical treatments delegated by the physician; to assist with prevention of disease and promotion of health for all people; to direct and supervise those assisting in meeting the nursing needs of the patient in the hospital and the community; to cooperate with other health professions; to function as members of a democratic society; and to contribute to the improvement of the nursing profession. The curriculum is also planned to provide a base for graduate study.[5]

The objective of the School of Nursing is to provide learning experiences patterned to encourage each student to became a self-directing, self-motivating individual who progressively demonstrates increasing insight, objectivity and skill in problem-solving. Curriculum offerings are designed to fulfill this objective through:

1. General education for further development of: (a) communication skills—verbal and nonverbal; (b) insight into and understanding of human behavior—individual and group; (c) concepts and facts from the basic sciences—physical, biological and nutritional; (d) values consistent with the concept of wholeness derived from study of the humanities.

2. Professional education in nursing which: (a) is patterned to build upon concepts and skills from the general education courses; (b) is a continuous progression of learning experiences enabling the student to meet the deeper needs of the patient; (c) is patterned to prepare the graduate for leadership positions in nursing; (d) may serve as an appropriate foundation for graduate study in nursing.

3. Co-curricular experiences: (a) in the State University setting with its variety of co-educational opportunities—cultural, intellectual and social; (b) in organized activities with other students enrolled in the University—Missouri Students' Association (gives students an effective voice in University affairs and enables each to better fulfill his responsibility to the student community through participation in a system of self-government), Student Nurses' Association (Missouri University Chapter of the Sixth District), Student Union Activities Council, Association of Women Students, Association of Men Students, and honorary and social societies.[6]

The basic professional curriculum includes 66 to 67 semester hours of classwork and clinical practice in the nursing major and 58 to 63 hours in general academic courses.

PROGRAM OF STUDY
BASIC PROFESSIONAL CURRICULUM

Nursing

Orientation to Nursing	3
Growth & Development of the Individual	3
Fundamentals of Patient Care	4
Elementary Materia Medica	1-2
Medical-Surgical Nursing	21
Maternal-Child Nursing	10
Psychiatric Nursing	5
Public Health Nursing	7
Senior Nursing	9
History & Trends in Nursing	3

General Academic

English Composition	6
Public Speaking	3
Physical and Biological Sciences (Chemistry, Zoology, Anatomy, Physiology, and Public Health Microbiology)	18-23
Humanities	10
General and Advanced Sociology	6
General and Educational Psychology	6
American History or American Government	5
Physical Education	4

This program may be completed in four academic years, plus one or two eight-week summer sessions of full-time, successful study. The graduate is awarded the degree Bachelor of Science in Nursing and is eligible to participate in State Board Examinations leading to licensure as a registered professional nurse.[7]

SUPPLEMENTAL CURRICULUM FOR GRADUATE NURSES

The purpose of the Supplemental Curriculum for Graduate Nurses is to provide the opportunity for graduates of three-year diploma programs in nursing, who meet admission requirements, to supplement basic preparation in keeping with the philosophy and objectives of the University of Missouri School of Nursing program leading to the Bachelor of Science degree in Nursing.

The objectives of this program are to provide for learning experiences designed to enable the student to: (a) broaden and deepen the student's preparation for beginning positions in all fields of nursing, including public health; (b) enrich understanding and appreciation of the relationship of personal growth and development to effective professional practice; (c) recognize values and establish foundations for participation in a program of continuing education.

PROGRAM OF STUDY
SUPPLEMENTAL PROGRAM FOR GRADUATE NURSES

Nursing

Individual Relationships in Nursing	4
Public Health Nursing	7
Improving the Quality of Nursing Care	3
Nursing Care Practice	4
Principles of Administration in Clinical Unit	2
Basic Principles of Teaching and Learning	2
Nursing Profession Today	3
Total	47

General Academic

English Composition	6
Public Speaking	3
Public Health Microbiology	4
Physical Science	5
Educational Psychology	3
Advanced Sociology	3
Psychology or Sociology Elective	2
Humanities	10
American History or American Government	5
Free Elective	6
Total	25

Credit toward advanced standing in nursing	52 hours
Grand Total	124 hours

The length of the program is approximately two academic years and two eight-week summer sessions for the student who attends full time and has had no previous college work. Upon successful completion of the program of study, the student is awarded the degree Bachelor of Science in Nursing.[8]

CONTEMPORARY PROFESSIONAL NURSING

The growing complexities of medical care with emphasis on prevention and the emotional factors which contribute to disease are reflected in both the quantity and quality of total medical and health services. The professional nurse fills a significant role in providing these health services. With the increased duties and responsibilities delegated to the professional nurse, the increased consumer demand for nursing care, and the growing members of practical nurses and aides assigned to assist the professional nurse, the need for highly competent nurses, capable of problem-solving and with a high degree of skill, mature judgment, and leadership qualities is evident.[9]

Collegiate nursing education today is essentially a marriage of liberal arts and professional nursing education providing a broad, sound educational background including manipulative, technologic and psychologic skills as a basis for problem-solving and judgment making; and managerial, administrative and communication skills involved in interpretation, team planning and action.[10]

Concepts derived from the study of the humanities serve as a basis for understanding the cultural and social forces that govern the racial, economic and political groups which constitute the consumers of nursing services. Concepts derived from the sciences and arts serve to develop understanding of the world in which the nurse works and lives.[11]

In response to the modern social and technologic demands, the key direction of preparation today is to provide education commensurate with level of responsibility. It has been estimated that the responsibilities of approximately 20 per cent of the positions in nursing are such that preparation at the baccalaureate level is needed and for an additional 13 per cent graduate education in nursing based on baccalaureate preparation is necessary.[12] In Missouri, and nationwide, the percentage of students entering basic degree programs, although increasing, has been below the number needed to meet the needs. Of the students admitted to basic baccalaureate and diploma programs in Missouri during the academic year 1956-1957, only 9.4 per cent entered basic baccalaureate programs. This is a lower percentage than the average of 13.8 per cent for the Midwest region and the national average of 15.7 per cent.[13, 14]

The increasing number of college-age youth offers encouragement for increased enrollment in schools of nursing provided nursing attracts at least as high a proportion as in the past. However, to fulfill adequately the responsibilities of the positions in nursing, a larger proportion than in the past of those with the capacity for academic study should be guided into collegiate programs.

CURRENT ENROLLMENT AND FUTURE PLANS FOR THE SCHOOL OF NURSING

Since the opening of the Medical Center in 1956, the enrollment in the University of Missouri School of Nursing has shown a steady increase. In the fall semester, 1959, 177 students were enrolled in the Basic Professional Curriculum and 31 in the Supplemental Program for Graduate Nurses. These students represented many areas of the State of Missouri including one student from each of the following counties: Audrain, Barry, Butler, Caldwell, Cape Girardeau, Carter, Cass, Chariton, Christian, Dade, Daviess, Gasconade, Henry, Howard, Howell, Johnson, Laclede, Lafayette, Linn, Miller, Phelps, Platte, Scott, Stoddard, and Worth; two students from Bollinger, Buchanan, Clay, Dunklin, Jasper, Jefferson, Lawrence, Livingston, Madison, Marion, McDonald, New Madrid, Nodaway, Osage, Pettis, Polk, Shelby, and Warren; three from Callaway and Montgomery; four from Greene; five from Franklin and St. Francois; six from Saline; seven from Cole and Sullivan; thirteen from the City of St. Louis; fifteen from Jackson; twenty-six from St. Louis County, and twenty-eight from Boone.[15]

Curriculum changes for this year include the initiation of a plan for field experience in public health nursing as a required unit in both the basic degree and the supplemental program for graduate nurses. For some of the students this field experience will be in rural county health units. Through the Missouri Division of Health and the county health units arrangements have been made for one student in each of the following counties during February and March: Barry, Dallas and Lawrence.

Many facets are involved in the future development of the School of Nursing. To prepare nurses for the responsibilities of the positions which require preparation beyond the baccalaureate level, it is imperative that plans for education in nursing leading to a Master's degree be initiated in the near future. This together with anticipated increases in the enrollment in current curricula and increased demands for expanding the continuing education program, will require additional faculty and facilities for teaching.

Summary

Today's graduate of the School of Nursing can look with pride at the University of Missouri's long-term contribution in providing educational programs consistent with the national trends in nursing. Current programs reflect the contemporary trend toward providing education commensurate with level of responsibility. Planning for anticipated increased enrollment in the current programs and for graduate education in nursing is aimed toward enabling the School of Nursing to fulfill the purpose for which it was established; namely, to help meet the needs of the people of Missouri for nursing services.

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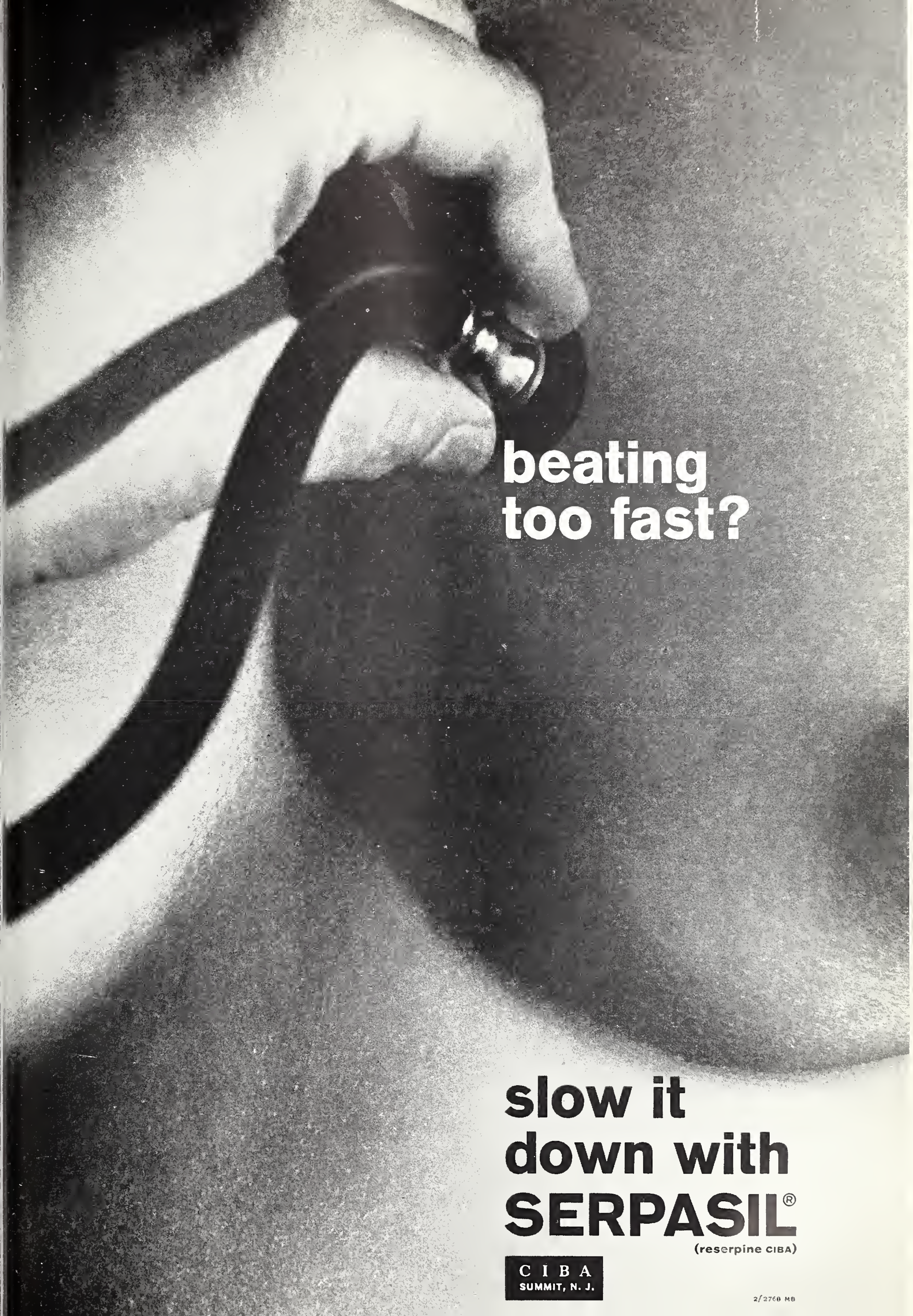
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R. O. Muether, M.D.

President's Message

The first official duty of an incoming President, after graciously acknowledging the honor that has been given him, is to appoint the standing and special committees for the coming year. This was done at the St. Louis 102nd Annual Session in St. Louis.

Committee members have been notified and many replies have been received. I would like to urge each member asked to serve in this capacity to accept, and to serve diligently on his committee. The greatest part of the work of the Association is based on the work of committees. They initiate actions which then go to the Council and the House of Delegates and the Council during the year, between sessions of the House, refer many matters to the various committees for their study and advice to the Council. A committee member is one of the most important links in the chain of the work of the Association and I would urge that those that have been appointed to these posts realize the value they can be to the Association.

One Committee, which is not appointed by the President but on which I have the privilege of serving as a member, well exemplifies its work in the present issue of Missouri Medicine. The University of Missouri Medical Center is to be congratulated on this issue for which they have taken the responsibility.

R. O. Muether M.D.

EDITORIALS

MEDICAL EDUCATION

In this brief editorial I would like to express the philosophy of medical education of the new Department of Pediatrics at the University of Missouri.

The art of medicine has progressed but little since the turn of the century. The scientific advances in the same period have been of such tremendous depth and scope that is no longer possible for any one man to gain total command of the medical sciences. Since complete command of the field of medicine can no longer be attained, the meaning of the doctorate in medicine has been changing.

The M.D. degree has gradually evolved to imply the possession of the basic principles of the medical sciences and the art of applying this knowledge to human problems. The achievement of the M.D. should serve as documentary evidence of the fitness of its holder to continue his education, whether he becomes a general practitioner, specialist, teacher or investigator. The M.D. degree, in no way, certifies especial proficiency in any limited field of medicine, but merely guarantees overall readiness for training in general practice, in specialties or in research. Preparation for the M.D. degree remains the basic objective of every school of medicine despite undue pressures for speciality and research training, extramural postgraduate education, and the need of its faculty for time for research and patient care.

The orientation of the clinical student to the patient's total needs, rather than to a series of diseases, is the basis of the teaching program in the pediatric department. The study of disease gives the student the tools with which to work. However, the study of disease must not be allowed to overshadow the host, who himself is the real reason for the physician. We believe that if we are to be successful in stemming the tide of over-specialization we must, by example, live a practical philosophy of application of the medical arts and sciences to the patient as he presents himself, and not merely to disease. The student first sees the patient in a general setting with undiluted social, economic, psychic, nutritional and medical problems. The student can, by this approach, better learn the full use of the many medical, surgical and ancillary medical consultants by a continuing association with the same patient. Those ideas, facts, technics and philosophies which a student really understands become a real part of his experience, and are the things that he retains and continues to utilize throughout his life. Certainly there is no field of teaching in which this is more important than it is in medicine, for here it must be achieved with all members of a class—not just a few exceptional students. The student must learn medicine—not merely learn about medicine, for if he is merely taught about medicine he can never become a good physician. The understanding of patients as human beings with problems rather than as packages of pathology is the golden thread of the cloth that separates the physician from the man who merely holds an M.D. degree. This thread must be woven throughout every portion of his training and cannot be completely separated and formalized.

During these early years of expansion the growing clinical faculty of the University of Missouri has had to devote its major efforts to develop a sound undergraduate program. More recently we also are improving and expanding our postgraduate programs including a two year general practice residency.

We appreciate the active support and interest of the Missouri State Medical Association in our medical school. We are especially indebted to our fellow members for providing us with excellent patient resources.

It has been an exciting and rewarding experience to have helped with the expansion of the School of Medicine of the University of Missouri from a two year to a four year program.

Robert J. Jackson, M.D.

Ramblings of the Field Secretary

The Eighth Councilor District meeting at the State Sanatorium in Mount Vernon, Tuesday evening, February 16 served as an interesting experiment in keeping a meeting on a definite time schedule. It can be done as was demonstrated on this occasion. The social hour began promptly at 6:15 p.m. and terminated at 7:15. Dinner was served at 7:30 p.m. and was finished by 8:20. The formal program began promptly at 8:30 and closed at 10:00 p.m. This matched the time schedule set-up in the planning of the meeting.

Past experience points up how easy it is for an evening program to start late and continue far beyond the scheduled time for adjournment. For many physicians who have traveled 50 to 75 miles to attend such a meeting, the late hour they get home is not too pleasing. It is reasonable to assume that medical meetings which habitually start and end at a scheduled time are apt to be better attended. The person in charge of the meeting needs to assume the responsibility of keeping the entire program on schedule. This was well done by the Councilor, Dr. W. W. Tillman, at his Eighth District meeting, February 16.

Drs. Perry, Peterson and Wray, members of the Committee on Aging, were present.

The program of this meeting had much concern with problems of the health care of the aged and with proposed legislation pertaining thereto. It was interesting to note that three members of the State Medical Association Committe on Aging were present, namely: Drs. Ralph Perry, Kansas City; Stanley Peterson, Springfield, Chairman; and Rolla Wray, Nevada. Additional details of this meeting appear elsewhere in this issue under the section on Councilor District News.

The 5th Annual Spring Clinical Conference at the University of Missouri Medical School will be held on Wednesday and Thursday, May 11 and 12. An unusually strong program has been arranged this year which is designed to interest both general practitioners and specialists. The Missouri Academy of General Practice is a co-sponsor of the Conference with Category I Postgraduate Credit in store for those Academy members who attend. The program of the Conference is published elsewhere in this issue of Missouri Medicine. Why not look it over carefully; you may want to attend.

The "Dollars and Sense" program of the St. Louis Academy of General Practice, for St. Louis and Washington University Medical students, on Sunday, February 21, brought forth numerous requests from the students for more of the same thing. A report of that unique program appears on the Missouri Academy of General Practice page in this publication.

MISSOURI ACADEMY OF GENERAL PRACTICE

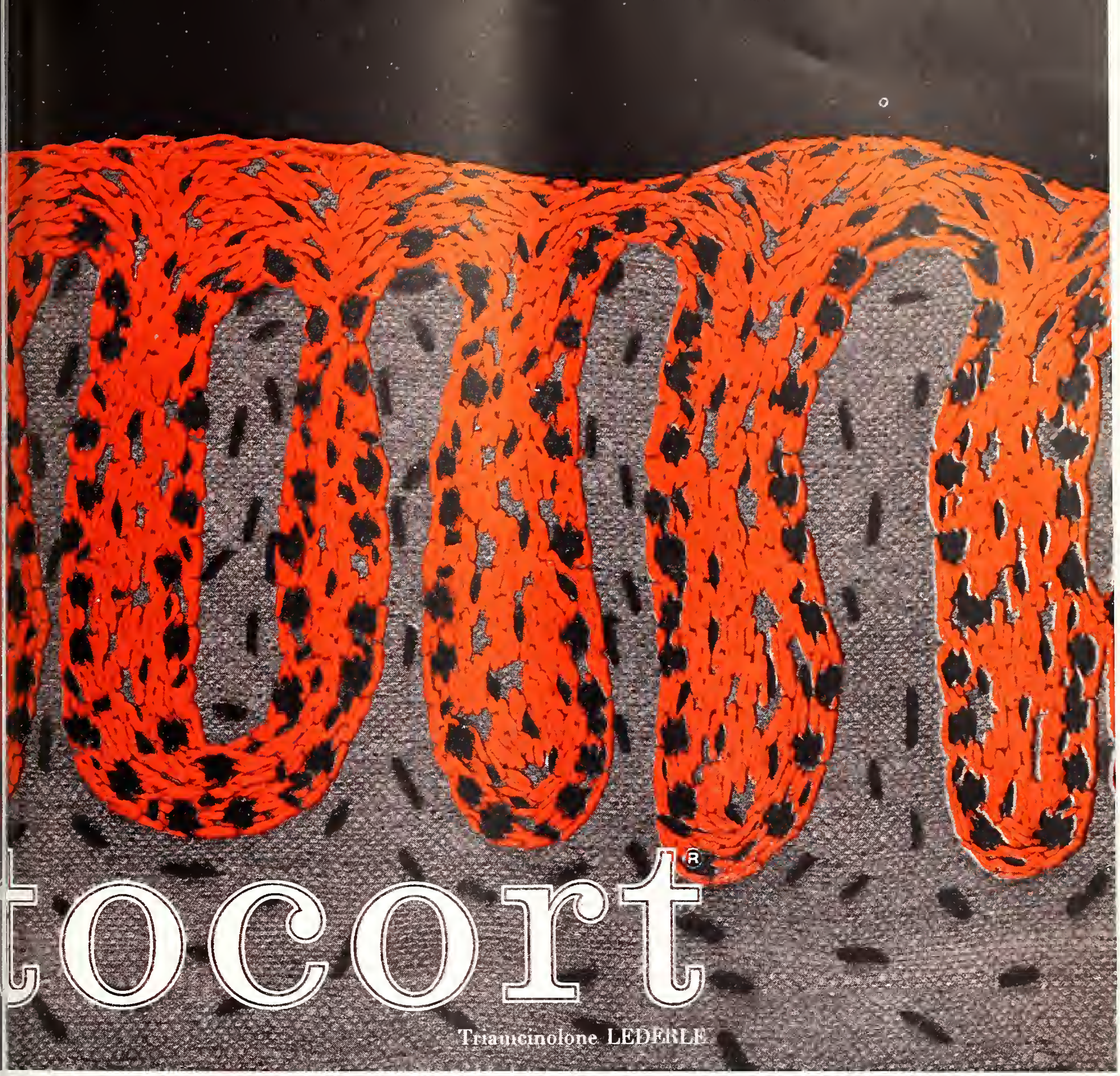
(Continued from page 414)

on what it is like to be a woman doctor. She said that there are many opportunities for women medics today and that it is a rewarding life and a most full one when combined with rearing a family.

To wind up the formal afternoon program Dr. Mullarky moderated a panel discussion by wives of Academy members on what it's like to be the wife of a general practitioner. Members of the panel were: Mrs. Walter Gunn, Mrs. Robert Keller and Mrs. Barney Finkel. The panel members presented a solid front in emphasizing the enjoyable position as wife of a real family doctor.

Following the program a buffet supper was served in the Medical Society's Banquet Hall. During this period, members of the St. Louis Academy circulated to answer questions of the students. A good number of Academy members and their wives were present for the entire program.

Orchids are due Mr. Hollister Smith, Executive Secretary of the St. Louis Medical Society, for arranging the excellent buffet supper which was so well enjoyed by all.



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News—Personal and Professional

Taking part in a public panel discussion on "The Case for an Area-Wide Health Authority" in Kansas City on March 24 were **Hector W. Benoit, Jr.**, M.D., and **Abraham Gelperin**, M.D., Kansas City.

At a recent meeting of the Monett Junior High Parent-Teacher Association, **Rosellen Cohnberg**, M.D., Monett, was guest speaker.

Speaker at Big Island Parent-Teacher Association at Butler was **Edward W. Cline**, M.D., Poplar Bluff, who spoke on "Arthritis."

The American Association of University Women, Jefferson City branch, had as a speaker recently **C. W. Meinershagen**, M.D., Jefferson City, who spoke on "Problems of Aging."

An open school health council meeting at Carthage was addressed by **Charles A. Brasher**, M.D., Mount Vernon, who discussed the pilot tuberculosis skin testing conducted in Newton County.

The *Springfield News-Leader* recently carried an article about **Merritt L. Gentry**, M.D., Springfield, and his collection of pipes. The article also gave some of Dr. Gentry's views on public health.

A post with the United States Public Health Service was accepted in January by **C. M. Grace**, M.D., who had practiced in Chillicothe since 1947.

New officers were elected at the January meeting of the Kansas City Southwest Pediatrics Society. **T. F. Edwards**, M.D., North Kansas City, was elected president; **Gerald E. Hughes**, M.D., Kansas City, vice president, and **Richard D. Blim**, M.D., Kansas City, secretary-treasurer.

The 11th annual Dr. F. G. Thompson, Sr., Memorial lecture, sponsored by the Thompson, Brumm and Knepper Clinic, St. Joseph, will be presented on May 19 at the Clinic Building by L. F. Jourdonais, M.D., Evanston, Ill.

The greater St. Louis Society of Radiologists have elected **Charles J. Cherre**, M.D., as president; **Hugh Harting**, M.D., vice president, and **Armand E. Brodeur**, M.D., secretary-treasurer.

The medical staff of St. Vincent's Hospital, St. Louis, has elected **Omer E. Hagebusch**, M.D., St. Louis, as president, and **William B. Lytton**, M.D., St. Louis, vice president.

The Woman's Auxiliary of the Pettis County Medical Society heard a discussion on present legislation concerning the medical profession by **T. J. Hopkins**, M.D., Sedalia, at a meeting in February.

The St. Louis College of Pharmacy conferred an award on **C. Rollins Hanlon**, M.D., St. Louis, at a dinner meeting on February 27.

The Hannibal High Twelve Club had as speaker in late January **E. M. Lueke**, M.D., Hannibal.

The *Chillicothe Constitution-Tribune* carried a picture story about **G. W. Carpenter**, M.D., Chillicothe, on the occasion of his 80th birthday late in January, calling attention to his continued activity in medical practice.

The Jasper County heart campaign is being headed by **M. H. Black**, M.D., Joplin. **C. B. Schoeberl**, M.D., Joplin, will head the Joplin heart campaign.

The Family and Children's Service of Greater St. Louis has elected **William H. Masters**, M.D., St. Louis, as president. The organization celebrates its 100th anniversary this year.

A joint meeting of the Bernard, Oakville and Point Parent Teachers' associations was addressed by **Armand E. Brodeur**, M.D., St. Louis, who spoke on "Strontium 90 in the St. Louis Area Milk."

The Southeast Missouri Society of X-ray Technologists had as speaker at a meeting in Cape Girardeau, **Milton Shoss**, M.D., Cape Girardeau, who spoke on "Reaction to Intravenous Iodine."

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ADVERTISING COUNCIL • PUBLIC SERVICE •

"Medical Missionaries in Relation to World Peace" was the subject of a talk presented by **Paul B. Nussbaum,** M.D., Cape Girardeau, at a meeting at the Zion Methodist Church at Gordonville early in February.

The 1960 heart fund campaign in Sikeston will be headed by **Carl G. Popp,** M.D., Sikeston.

Speaker at the 77th annual meeting on February 19 or the St. Joseph Y.M.C.A. was **Robert M. Myers,** M.D., Kansas City.

"Allergies" was the subject of a talk presented by **J. A. Chapman,** M.D., Cape Girardeau, before a meeting of nurses in Cape Girardeau early in February.

The board of trustees of the Laclede County Health Center has named **B. B. Hurst,** M.D., Lebanon, as part-time health officer for the county.

The Cole County Medical Secretaries and Assistants had **Harold C. Stricker,** M.D., Jefferson City, as speaker at a recent meeting.

Recent meetings at which **Addison M. Duval,** M.D., Jefferson City, has spoken are the Springfield Planning Council, the Boone County Association for Mental Health, the Woman's Auxiliary of the Cole County Medical Society, the St. Joseph Community Welfare Council, a joint meeting of the Fulton American Association of University Women and Delta Kappa Gamma, and the Jefferson City Capital City Women's Club.

Among speakers at the 89th annual session of the California Medical Association on February 21 in Los Angeles was **Lauren V. Ackerman,** M.D., St. Louis.

NEW MEMBERS

Loren G. Agee, M.D., 5801 Kingslee Dr., Hickman Mills, has become a member of the Jackson County Medical Society. Dr. Agee is a native of Missouri, received his preliminary education in Kansas, and his M.D. degree from University of Kansas School of Medicine, Lawrence, in 1951.

Richard F. Boone, M.D., 901 Elm St., Doniphan, became a member of the Butler-Ripley-Wayne County Medical Society on January 12, 1960. Dr. Boone is a native of Missouri, received his M.D. degree from Kansas City College, in 1920.

John F. Commerford, M.D., 114 N. Main St., St. Charles, became a member of the Lincoln-St. Charles County Medical Society in January, 1960. Dr. Commerford is a native of Missouri, received his preliminary education in Indiana, and his M.D. degree from Washington University, St. Louis, in 1953.

George L. Curran, M.D., 7241 Greenway Ave., St. Louis 30, has become a member of the St. Louis Medical Society. Dr. Curran is a native of Massachusetts, received his preliminary education in Massachusetts, and his M.D. degree from Columbia University College of Physicians and Surgeons, New York, in 1944. He interned at Presbyterian Hospital, New York.

Thomas J. Fischer, M.D., 5610 Enright Ave., St. Louis 12, became a member of the St. Louis Medical Society on February 9, 1960. Dr. Fischer is a native of Illinois, received his preliminary education in Missouri, and his M.D. degree from the University of Missouri, Columbia, in 1957. He interned at Bellevue, New York.

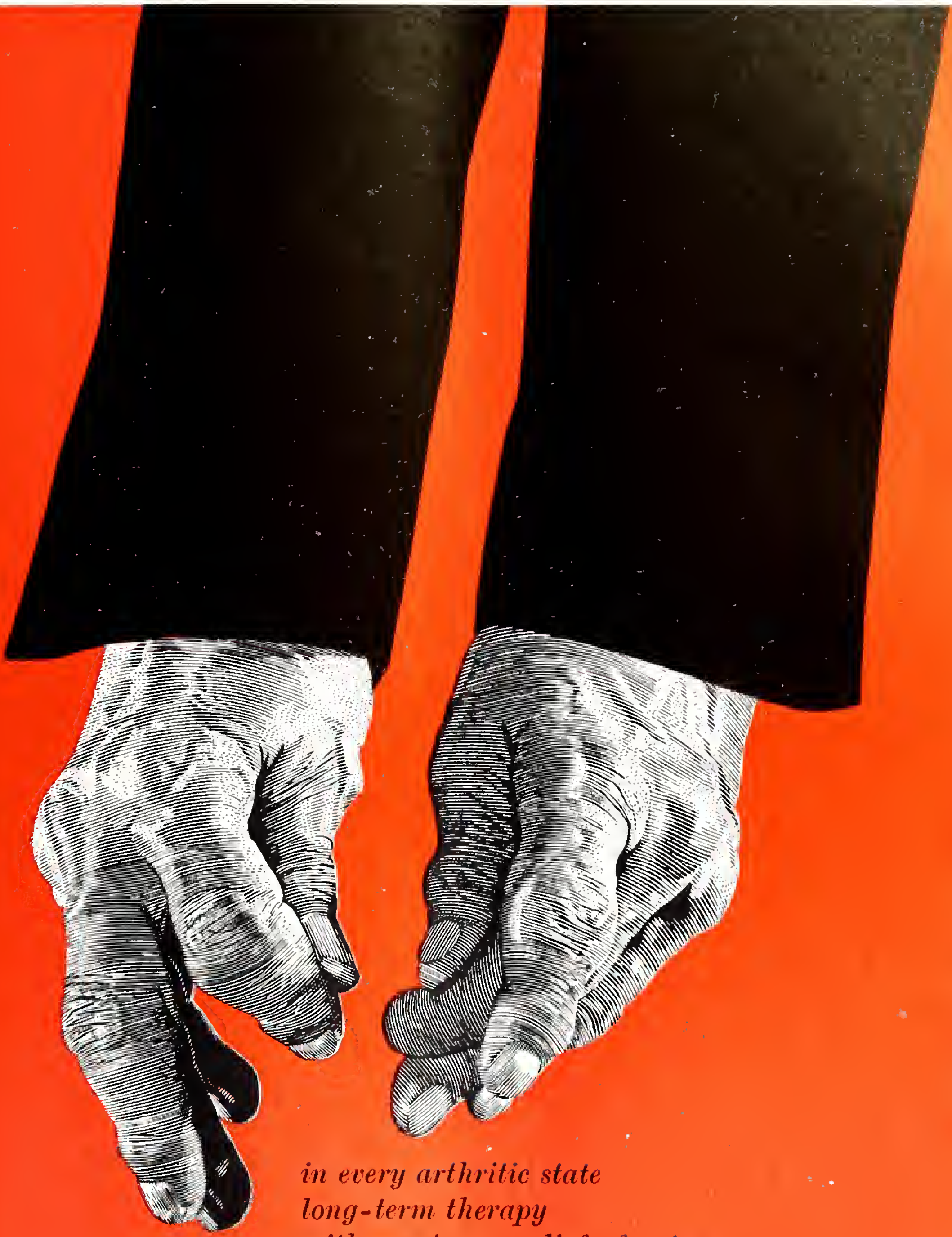
Andrew J. Fritsch, M.D., 4931 Parkview Pl., St. Louis 10, became a member of the St. Louis Medical Society on February 9, 1960. Dr. Fritsch is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine, St. Louis, in 1957. He interned and is serving a residency at St. John's Hospital, St. Louis.

James E. Gotham, M.D., Psychiatric Receiving Center, Kansas City, has become a member of the Jackson County Medical Society. Dr. Gotham is a native of Missouri, received his preliminary education in Minnesota, and his M.D. degree from Creighton University, Omaha, in 1955.

Max I. Miller, M.D., 2826 Main St., Kansas City, has become a member of the Jackson County Medical Society. Dr. Miller is a native of Kansas, received his preliminary education in Kansas, and his M.D. degree from the University of Kansas School of Medicine, Lawrence, in 1949.

Clarence C. Reynolds, M.D., 2612 E. 39th St., Kansas City, has become a member of the Jackson County Medical Society. Dr. Reynolds is a native of Missouri, received his preliminary education in Nebraska, and his M.D. degree from Meharry Medical College, Nashville, in 1952.

Robert C. Richert, M.D., Kansas City General



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Hospital, Kansas City, has become a member of the Jackson County Medical Society. Dr. Richert is a native of Kansas, received his preliminary education in Kansas, and his M.D. degree from University of Kansas School of Medicine, Lawrence, in 1946.

Irwin K. Rosenberg, M.D., 1413 Bluebird Terrace, St. Louis 17, became a member of the St. Louis Medical Society on February 9, 1960. Dr. Rosenberg is a native of New York, received his preliminary education in Pennsylvania, and his M.D. degree from Yale University School of Medicine, New Haven, in 1953. He interned at Barnes Hospital, St. Louis.

A. Craig Schewe, M.D., 5535 Delmar Blvd., St. Louis 12, became a member of the St. Louis Medical Society on February 9, 1960. Dr. Schewe is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from the University of Missouri School of Medicine, Columbia, in 1958. He interned and is serving a residency at St. Luke's Hospital, St. Louis.

Mary Patricia Shanahan, M.D., 204 Winter St., Monroe, became a member of the Marion-Ralls-Shelby County Medical Society on January 2, 1960. Dr. Shanahan is a native of Illinois, received her preliminary education in Missouri, and her M.D. degree from St. Louis University, St. Louis, in 1958.

O. D. Smith, M.D., Baptist Memorial Hospital, Kansas City, has become a member of the Jackson County Medical Society. Dr. Smith is a native of Missouri, received his preliminary education in Kansas, and his M.D. degree from the University of Kansas School of Medicine, Lawrence, in 1951.

Daniel J. Sprehe, M.D., Warrensburg, Missouri, became a member of the Johnson County Medical Society on February 20, 1960. Dr. Sprehe is a native of Oklahoma, received his preliminary education in Oklahoma, and his M.D. degree from the University of Oklahoma, Norman, in 1957.

Ian Murchie Thompson, M.D., University of Missouri School of Medicine, Columbia, became a member of the Boone County Medical Society on February 14, 1960. Dr. Thompson is a native of New York, received his preliminary education in New York, and his M.D. degree in New York, in 1947.

Vernon E. Wilson, M.D., University of Missouri School of Medicine, Columbia, became a member of the Boone County Medical Society on February 14, 1960. Dr. Wilson is a native of Iowa, received his preliminary education in Illinois, and his M.D. degree from the University of Illinois, Urbana, in 1952.

DEATHS

Burns, Jonathan E., M.D., Charles Town, West Virginia, a graduate of Johns Hopkins University School of Medicine, 1908; member of Jackson County Medical Society; aged 77; died January 28.

Lockwood, W. E., M.D., Slater, a graduate of the American Medical College 1917; member of Saline County Medical Society; aged 68; died February 1.

Hickerson, John C., M.D., Independence, a graduate of Beaumont Medical College, 1899; member of Jackson County Medical Society; aged 85; died February 4.

Schuchat, W. Louis, M.D., St. Louis, a graduate of Missouri Medical College, 1896; member of St. Louis Medical Society; aged 85; died February 4.

Skoog, Andrew L., M.D., South Pasadena, California, a graduate of Northwestern University School of Medicine, 1902; member of Jackson County Medical Society; aged 83; died February 5.

Jungk, Carl G. W., M.D., St. Louis, a graduate of Washington University School of Medicine, 1903; member of St. Louis Medical Society; aged 83; died February 6.

Hall, John, M.D., Ashland, a graduate of Washington University School of Medicine, 1908; member of Boone County Medical Society; aged 75; died February 12.

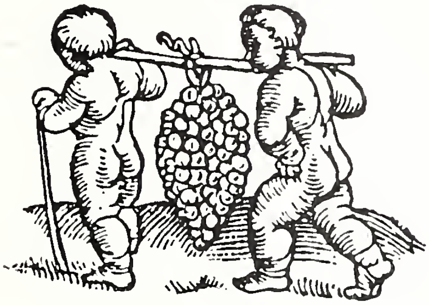
McCubbin, James B., M.D., New York City, a graduate of Washington University School of Medicine, 1907; member of Callaway County Medical Society; aged 75; died February 12.

Van Urk, Jules B., M.D., Carthage, a graduate of Columbia University College of Physicians & Surgeons, 1931; member of Jasper County Medical Society; aged 56; died February 13.

Kelling, George A., M.D., Waverly, a graduate of St. Louis College of Physicians and Surgeons, 1903; member of Lafayette-Ray County Medical Society; aged 78; died February 24.

Kane, R. Emmett, M.D., St. Louis, a graduate of Washington University School of Medicine, 1899; member and Past President of the St. Louis Medical Society; aged 82; died March 1.

why wine in digestive disorders?



Although the effects of wine on the digestive system have been discussed for centuries, it has been only in recent years that many of its physiological attributes have been determined.

WINE AND THE SALIVARY GLANDS—The increase in salivary flow following a moderate intake of wine is apparent almost immediately,[1] such increase being attributed to direct sensitization of secretory nerve endings.[2]

WINE AND GASTRIC SECRETION—With a pH averaging 3.2, wine resembles gastric juice more closely than does any other natural beverage. Its tannins, organic acids and salts of these acids serve as buffering agents to maintain this pH. Relatively low in content of alcohol, table wine has been found to stimulate gastric secretion and induce production of gastric juice high in hydrochloric acid, sodium chloride, rennin and pepsin.[3]

WINE AND THE DIGESTIVE TRACT—With its low concentration of alcohol, wine in moderate consumption has been found to induce a marked increase in biliary flow.[4] This, together with increased function of pancreatic enzymes, may thus encourage better digestion of fatty foods.

THEREFORE—IN THE TREATMENT OF DIGESTIVE DISORDERS—Wine is being widely recommended in the treatment of anorexia, hypochlorhydria without gastritis,mucous colitis, spastic constipation and diarrhea, and in digestive disorders stemming from emotional tension and anxiety.

These and other modern ℞ uses for wine are discussed in the brochure "Uses of Wine in Medical Practice." For your free copy write—Wine Advisory Board, 717 Market Street, San Francisco 3, California.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Buchanan County Medical Society

C. Thorpe Ray, M.D., Professor and Chairman of the Department of Medicine at the University of Missouri Medical School, presented the scientific program at the monthly meeting of the Buchanan County Medical Society, Wednesday night, February 3, at Hotel Robidoux in St. Joseph.

Dr. Ray spoke on, "Medical Approach to Chronic Renal Disease." Dr. Ray placed emphasis upon the importance of early diagnosis and treatment in order to secure the best chance of cure in renal disease. He also stressed the importance of correct diet.

The program was arranged by the local society program committee of which Dr. Richard V. Riddell is Chairman and Drs. Henry C. Willumsen and John N. Martin are members. The speaker was introduced by Dr. Caryl Potter, Jr. Dr. Ray's appearance in St. Joseph was sponsored by the St. Joseph Heart Association. Dr. Thompson E. Potter, President of the Society presided and as a part of the activities introduced M. B. Pettit, M.D., the new Superintendent of the State Hospital.

Fifty St. Joseph and northwest Missouri physicians attended the meeting.

William B. Rost, M.D., *Secretary*

Nodaway-Holt-Atchison-Gentry-Worth County Medical Society

The Nodaway-Holt-Atchison-Gentry-Worth County Medical Society held a joint dinner meeting with the Fourth Judicial Bar Association at the Armstrong Restaurant in Maryville on Saturday night, February 6. Approximately 40 were in attendance including doctors and lawyers.

The film entitled, "The Medical Witness," was shown.

A decision was made to appoint a committee of doctors and a committee of lawyers to work together on problems involved in litigation in which doctors are called upon to serve as witnesses.

The president of the Bar Association, Mr. Joe Beavers, presided over the joint meeting.

Robert Dunshee, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

J. J. WIMP, KIRKSVILLE, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The Chariton-Macon-Monroe-Randolph County Medical Society held its monthly dinner meeting at the Woodland Hospital in Moberly on Thursday night, February 11. The speaker of the evening was Dr. William McPhee of Upsher Laboratories of Kansas City who spoke on, "Fundamentals of Iron Metabolism."

He pointed out that there has been more interest created in recent years in the way the body handles iron because of the use of radioactive iron. He said that it is now possible to trace the path of iron through the body with considerable accuracy. These studies, he further pointed out, are of great importance to the physician who faces the patient with iron deficiency and occasionally iron excess.

One result of iron deficiency is a form of anemia, said Dr. McPhee, and this particular form of anemia is quite common in infants and young children and also in women during child bearing years.

Members present were: Drs. Josephine Baker, W. D. Chute, C. C. Cohrs, J. W. Fleming, Jr., T. S. Fleming, L. E. Huber, A. P. Rowlette, C. C. Smith and R. H. Young, Moberly; D. D. Stuart, Brunswick; C. C. Weger, Keytesville; J. E. Campbell, Gretchen Collins, D. E. Eggleston, H. S. Miller and Carl Rinker, Macon; F. A. Barnett, Paris; G. W. Hawkins, Salisbury; and P. V. Dreyer, Huntsville.

Josephine Baker, M.D., *Secretary*

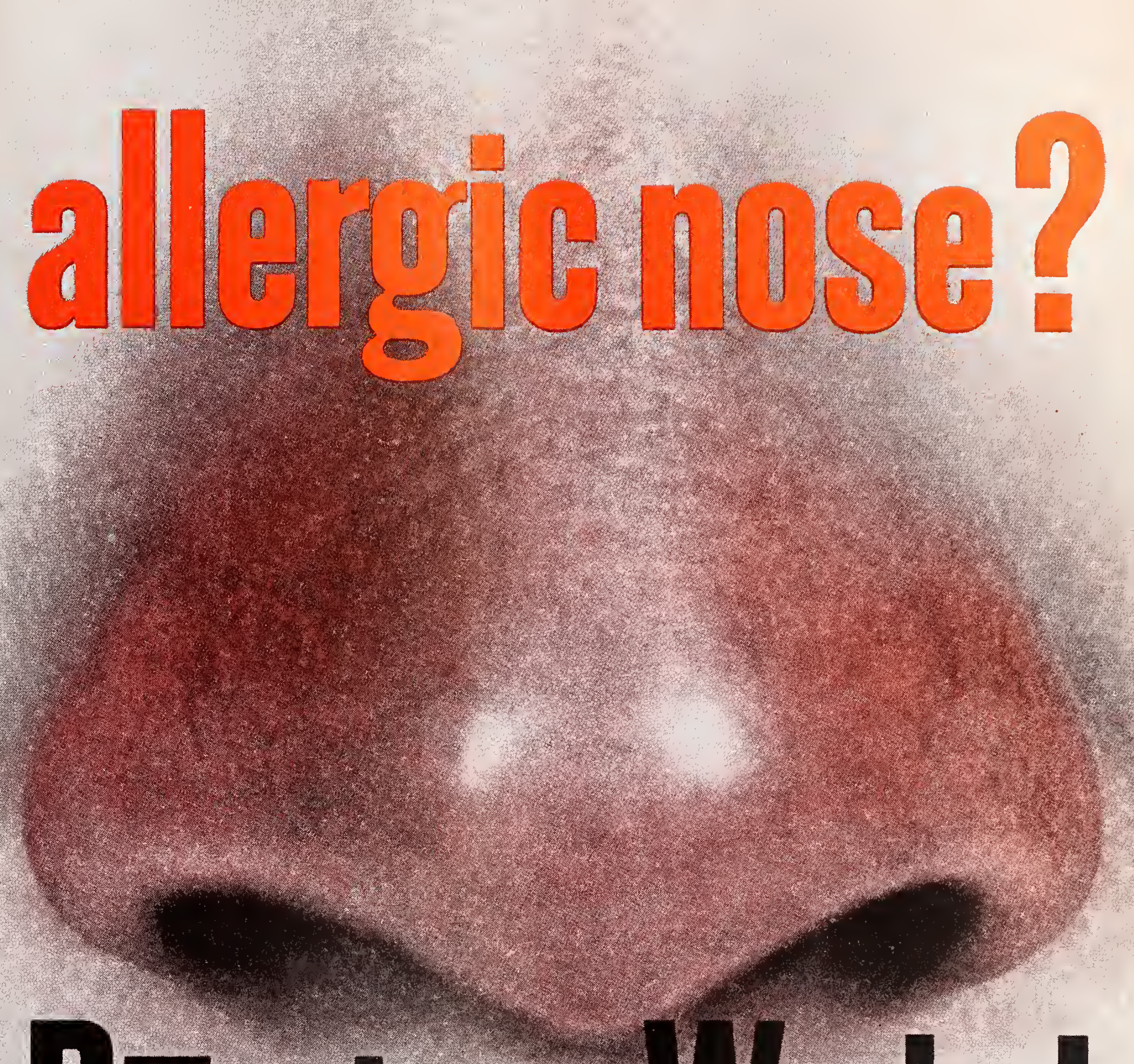
Marion-Ralls-Shelby County Medical Society

A dinner meeting of the Marion-Ralls-Shelby County Medical Society was held at the Mark Twain Hotel in Hannibal on Tuesday night, February 16. The evening festivities began with a social hour followed by dinner and then the program.

John Bircher, M.D., radiologist of St. Louis, presented an interesting and informative discussion on "The Uses of Radioactive Isotopes in the Diagnostic Aspects of Medicine."

A general discussion period followed his formal presentation.

Wyeth Hamlin, M.D., *Secretary*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—New England J. Med. *261*:478, 1959 (Schiller, I. W. and Lowell, F. C.)

Dimetane works with an effectiveness of 91% in respiratory allergies —NEW YORK J. MED. *59*:3060, 1959 (Fuchs, A. M. and Maurer, M. L.). In allergic and pruritic dermatoses the effectiveness rate of Dimetane is 94.6% —ANTIBIOTIC MED. & CLIN. THERAPY *6*:275, 1959 (Lubowe, I. I.). The A. M. A. Council on Drugs characterizes Dimetane as demonstrating "...a high order of antihistaminic effectiveness and a low incidence of side effects." —J.A.M.A. *170*:194, 1959.

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SIXTH COUNCILOR DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

West Central Missouri Medical Society

The regular monthly meeting of the West Central Missouri Medical Society was held at the Inn Hotel in Butler on Thursday night, February 11, with the usual social hour beginning at 6:30 p.m. However, due to weather conditions some of the members were late arrivals, but they were able to partake in part of the social hour offerings and all present were then served excellent steak dinners.

The speaker of the evening had been flown by plane from Columbia. The scientific part of the program was presented first so that the speaker and his pilot could be on their way back to Columbia. The pilot of the plane was introduced first, none other than Dr. V. E. Wilson, the new Dean of the University of Missouri Medical School. Dr. Wilson pilots his own plane and is doing considerable getting around over the state these days by that mode of transportation.

The main speaker of the evening, Dr. Philip Hitchcock, Associate Professor of Anesthesiology at the University of Missouri Medical School, spoke on a timely subject, "Modern Trends in Anesthesiology." He discussed some newer phases of local anesthesia particularly for use in the brachial plexus block. He closed his talk with the timely advice: when using anesthesia, look into the history of the patient particularly to find if they have had any cortisone, of any type or form, in the past eight months. It seems that they have been finding at the M.U. Medical Center some patients requiring anesthesia going into shock whom later they have found had some form of cortisone therapy.

Dean Wilson did not give a talk on this occasion but informed us he would be happy to speak to our Society at a later date.

Following the scientific program Dr. C. A. Lusk, Jr., Butler, presented credentials of his new associate, Dr. Nathan A. Masor from the State of Ohio. These were approved with Dr. Masor being accepted for membership in the society.

O. B. Barger, M.D., Councilor of the 6th District, discussed some points of interest regarding the coming State Association meeting in March. There being no further business the meeting adjourned until April when the next meeting will be held in Nevada.

Carter Luter, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Eighth Councilor District Meeting

Some 85 physicians attended a dinner meeting of the 8th Councilor District of the State Medical Association held at the Missouri State Sanatorium in Mount Vernon on Tuesday evening, February 16. Most of those in attendance arrived in time to enjoy a pleasant social hour at the home of Dr. Henry Sweany, President of the Ozarks Medical Society.

Dr. Perry was initial speaker.

An excellent meal was then served in the cafeteria of the State Sanatorium. The main program of the evening was held in the auditorium of the Administration Building.

The initial speaker on the program was Dr. Ralph Perry, Kansas City, President of the Missouri State Medical Association. He discussed the subject, "Some Important Problems and Projects of Your State Medical Association." Dr. Perry stressed the importance of all physicians concerning themselves with local, civic and political affairs and with all proposals for legislative action on health and medical care matters both on local, state and federal levels.

He mentioned the activities of a number of the Association Committees and particularly the Committee on Aging, the Committee to Study Corporate Practice and the Committee to Study Possible Changes in the Councilor Districts. His discussion pin-pointed, in fine fashion, a number of vital matters now under consideration by the officers, Council and appropriate committees of the State Association.

The second speaker of the evening, Mr. James W. Foristel, Ll.B., AMA Legislative Representative, Washington, D. C., spoke on "The Current

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provides symptomatic relief of nasal congestion and rhinorrhea of allergic or infectious origin Many patients whose symptoms are inadequately controlled by decongestants or antihistamines alone respond promptly and favorably to 'ACTIFED'.

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'Actidil'® brand Triprolidine Hydrochloride	2.5 mg.	1.25 mg.
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	TABLETS	SYRUP (5 cc. tsp.)	
Adults and older children	1	2	three times daily
Children 4 months to 6 years of age	½	1	
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Situation in Washington." Mr. Foristel gave an informative discussion of the status of health legislation now pending in Congress. He spent some time in discussing the Forand bill and the many factors concerned with it.

Mr. Foristel held attention of those in attendance.

The concluding speaker on the program was W. W. Tillman, M.D., who spoke on "A Councilor Reports to His District." This report covered items which have been under consideration by the Council of the State Association and many of which will come before the House of Delegates during the Association's Annual Session in St. Louis, March 13-16. At the close of this report a question and answer period was held. Questions were directed to either of the three speakers and to Mr. T. R. O'Brien, Executive Secretary of the State Association. The number of questions asked was good evidence of the interest of the physicians in the problems under discussion.

Attendance was good from throughout the district.

The meeting was adjourned at 10:00 p.m. so that those traveling a good distance could arrive home at a reasonable time.

The Ozarks Medical Society, serving as host for the meeting, cancelled their regular February meeting in lieu of this district session. In order to conform to the Greene County Medical Society By-Laws, a short meeting of that Society was called by the President, Dr. W. W. Tillman, at the beginning of the evening program and then adjourned.

Among those present were two State Association Delegates to the AMA, namely; Dr Durward Hall, Springfield, and Dr. Rolla Wray, Nevada. Dr. Wray and Dr. Roy Pearse of the 6th Councilor District were present to represent that district. Dr. J. H. Summers, Lebanon, Councilor of the 9th District and Chairman of the Council of the State Association, was present representing the 9th District.

Thanks of the district were extended to Dr. Charles Brasher, Superintendent of the State Sanatorium, for furnishing the facilities and handling other details of the meeting. Additional thanks were extended to Dr. Sweany for the enjoyable social hour at his home.

W. W. Tillman, M.D., *Councilor*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler-Ripley-Wayne County Medical Society

The Butler-Ripley-Wayne County Medical Society met for a dinner meeting at 6:30 p.m., at the Hickory House, January 27. Dr. McLain, the President, presided. Twenty-one members were present for this meeting which is the best turnout ever had for the Butler-Ripley-Wayne County Medical Society.

The program was under the direction of a Veterans Hospital panel group consisting of Dr. Tapp, Dr. Harwell, Dr. Cohen and Dr. Malinoski. The symposium was on "The Causes of Sudden Death." Dr. Harwell was moderator of the panel. Dr. Cohen paid particular attention to the causes of sudden death arising from cardiovascular and anaphylactoid regions. Dr. Malinoski presented the ENT and respiratory causes of death and their detection and Dr. Tapp presented the cerebral and lower respiratory tract causes of death.

The program was thoroughly enjoyed by all members present. A letter was read by the President from the Southeastern Missouri Science Fair to which the Medical Society is a contributor.

Dr. R. F. Boone was elected unanimously a member of the County Medical Society. Dr. May reported for the Board of Censors who unanimously approved his application and the vote of the Society was unanimous. Dr. Boone has recently moved to Doniphan from Kansas. The meeting was adjourned at 10:00 p.m.

E. T. Hansbrough, M.D., *Secretary-Treasurer*

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1. Lippmann, O.: Arch. Ophth. **57**:339, March 1957
2. Gordon, D.M.: Am. J. Ophth. **46**:740, November 1958.

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University of Missouri to Hold Clinical Conference

The fifth annual Spring Clinical Conference will be held May 11 and 12 at the University of Missouri Medical Center Auditorium. The conference is sponsored by the University of Missouri School of Medicine, the Missouri Heart Association, the Missouri Academy of General Practice and the Missouri State Diabetes Association. The program follows:

Wednesday, May 11, 1960

KENNETH K. KEOWN, M.D., Columbia, Presiding

8:00 a.m. Registration.
9:00 a.m. Welcome by Vernon E. Wilson, M.D., Dean and Director, University of Missouri School of Medicine.
9:10 a.m. Heart Disease in Children, Harry G. Stoeckle, M.D., Columbia, Associate Professor of Pediatrics, University of Missouri School of Medicine.
9:40 a.m. Coffee break, Graduate Lounge.
10:00 a.m. Present Status of Human Viral Diseases, Leonard M. Schuman, M.D., Minneapolis, Minn., Professor of Epidemiology, University of Minnesota School of Public Health.
11:00 a.m. Mitral Valvular Disease: Anatomic and Physiologic Considerations, Carlton B. Chapman, M.D., Dallas, Texas, Professor of Medicine, University of Texas Southwestern Medical School.
12:00 noon Office Ophthalmology, John A. Buesseler, M.D., Columbia, Associate Professor of Surgery, Chief of Ophthalmology, University of Missouri School of Medicine.
12:30 p.m. Luncheon, Doyle C. McCraw, M.D., Bolivar, Presiding.
2:00 p.m. Thromboembolism, Frederick A. Coller, M.D., Ann Arbor, Mich., Professor of Surgery, Emeritus, University of Michigan School of Medicine.
3:00 p.m. to 4:30 p.m. Panel: Poliomyelitis; Live Virus; Salk Vaccine.
Moderator: Owen A. Kearns, M.D., Professor of Preventive Medicine and Public Health, University of Missouri School of Medicine.
Panelists:
Leonard M. Schuman, M.D.
Edgar H. Belden, M.D., Jefferson City.
Clement E. Brooke, M.D., Columbia.

Thursday, May 12, 1960

H. O. LOYD, M.D., Jefferson City, Presiding

9:00 a.m. The Detection of Early Diabetes, Alexander Marble, M.D., Boston, Mass., Clinical Professor of Medicine, Harvard Medical School; Joslin Clinic.
10:00 a.m. Coffee break, Graduate Lounge.
10:20 a.m. Panel: Complication of Diabetes.
Moderator: Robert L. Jackson, M.D., Columbia.
Panelists:
Alexander Marble, M.D., Boston, Mass.
Carlton B. Chapman, M.D., Dallas, Tex.
Willis E. Brown, M.D., Little Rock, Ark.
John A. Buesseler, M.D., Colunbia.
12:00 noon Office Urology, Ian M. Thompson, M.D., Columbia, Associate Professor of Surgery, Chief of Urology, University of Missouri School of Medicine.
12:30 p.m. Luncheon.
2:00 p.m. Carcinoma of the Female Pelvis, Willis E. Brown, M.D., Little Rock, Ark., Professor of Obstetrics and Gynecology, University of Arkansas School of Medicine.
3:00 p.m. to 4:30 p.m. Panel: Recurrent Carcinoma of the Breast: Diagnosis and Treatment.
Moderator: John J. Modlin, M.D., Columbia.
Panelists:
Frederick A. Coller, M.D., Ann Arbor, Mich.
Theodore E. Keats, M.D., Columbia.
Thomas W. Burns, M.D., Columbia.

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1. Spoor, H.: Proc. Scient. Sec. TGA No. 31, May 1959
2. Frank, L.: New York J. Med. 59:2892, 1959

Medicare Changes Announced

Further clarifications concerning identification of eligible patients and the procurement of blood under the Medicare program have recently been issued by the Office for Dependents' Medical Care of the Department of Defense.

IDENTIFICATION CARDS

While the DD Form 1173 (Uniformed Services Identification and Privilege Card) is the primary means of identifying dependents eligible to receive authorized care under Medicare, there may still be cases in which dependents do not have the card.

DD FORM 1173

The DD Form 1173 is valid only from the date of issue through the expiration date shown. Cards showing an expired date, no date, or an "indefinite" date are *not* acceptable.

This is a complete change in policy regarding cards bearing an "indefinite" date. When such cards are presented, the case should be treated as though the card were not available and identification documented as in those cases.

In the case of a child under age 10 who has no card, the physician's Statement of Services form should contain an authorization card number and expiration date derived from a parent. This applies although the child may be accompanied by the sponsor, or guardian, who himself may not be entitled to a card.

EMERGENCY CASES

In emergency cases in which the DD Form 1173 is not available, the physician's Statement of Services must be accompanied by:

1. A statement from the attending physician that the case was an emergency.

2. One of the following types of collateral identification:

(a) Statement by a local commander that the patient was a dependent eligible for Medicare benefits in civilian facilities during the time the services were rendered.

(b) Other official uniformed services document reflecting the patient as a dependent eligible for Medicare benefits in civilian facilities during the time the services were rendered.

(c) Statement by the physician that he has personal knowledge that the patient was a dependent eligible for Medicare benefits in civilian facilities during the time the services were rendered.

(d) An entry in the space on the Statement of Services form normally used for the identification card number describing some civilian type of identification such as Social Security Card, driver's license, etc., which identifies the person certifying to the patient's eligibility for care. When this type of identification is used, care should be taken to be sure that the name on the identification used is the same as that signed on the Statement of Services form by the certifying person. The Social Security number, number and state of the driver's license or other identifying information should be entered in the space on the Statement of Services.

3. A statement from the patient as to the reason the DD Form 1173 was not available should also accompany the Statement of Services.

NON-EMERGENCY CASES

Where the DD Form 1173 is not available at the time of commencement of care, but no emergency exists, an eligible dependent may commence receiving authorized care as a potential beneficiary of the program, but *payment by the government is contingent upon the claim being documented* in one of the following ways:

1. Statement from an official authorized to issue DD Forms 1173 indicating that the patient was an eligible dependent during the time the services were rendered. Such statement must include the name, rank or grade and position of the official, and a statement that he is authorized to issue DD Forms 1173.

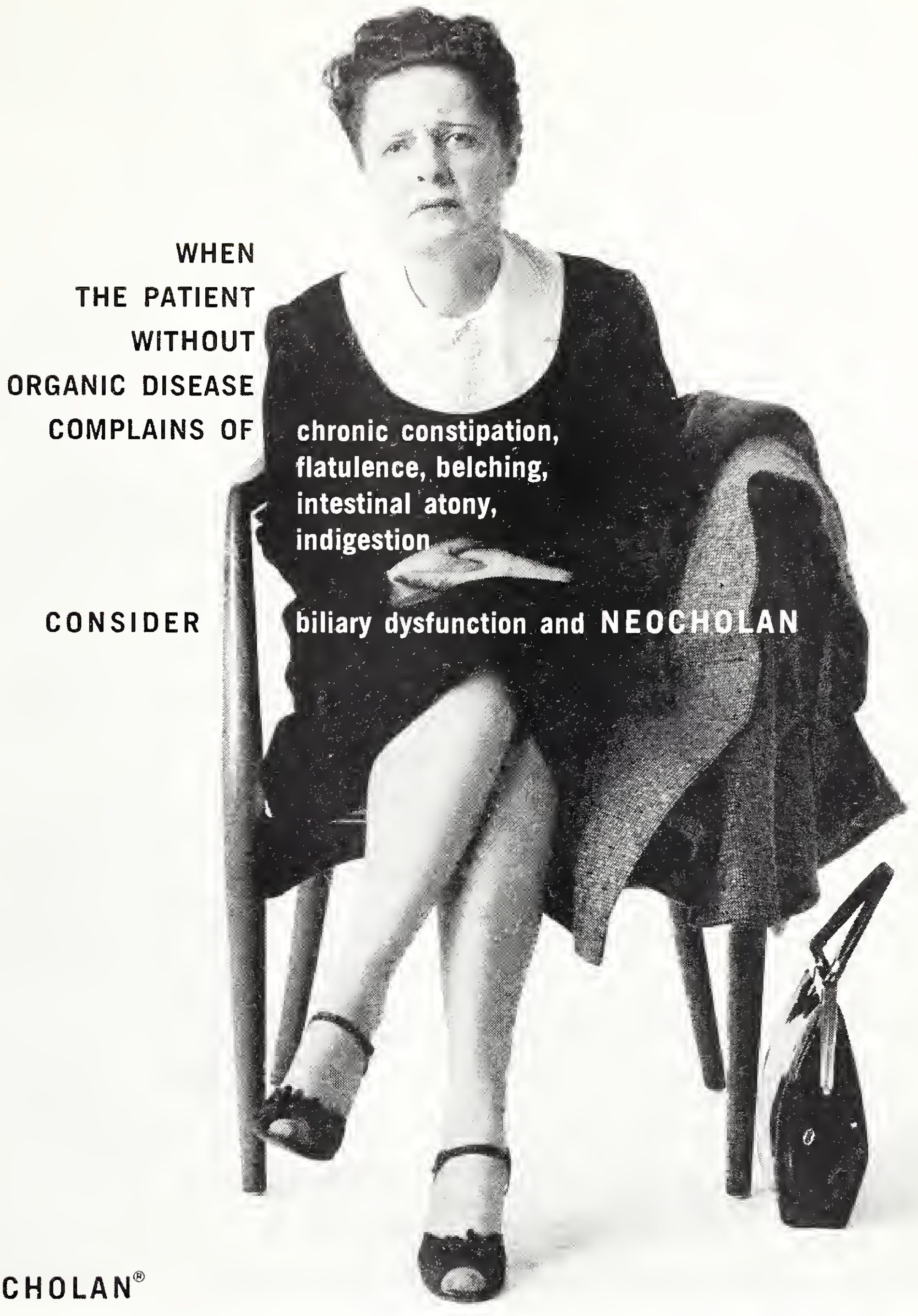
2. If the beginning date of a period of care is earlier than the date of issue of the DD Form 1173, the information from the DD Form 1173 may be used on the Statement of Services form provided that a letter from the official issuing the DD Form 1173 is attached indicating that the patient was an eligible dependent during the period covered by the Statement of Services.

In all cases in which care is obtained from civilian sources, the dependent, parent, sponsor, legal or acting guardian is required to execute the application certificate pertaining to identification on the Statement of Services, DA Form 1863.

PROCUREMENT OF BLOOD

The cost of blood and the service charge for blood are allowable benefits under the Medicare program, with certain limitations.

It is intended, however, that the government


WHEN
THE PATIENT
WITHOUT
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chronic constipation,
flatulence, belching,
intestinal atony,
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Your patient will often respond promptly to Neocholan therapy. It greatly increases the flow of thin, nonviscid bile and corrects biliary stasis by flushing the biliary system. It also relaxes intestinal spasm, resulting in an unimpeded flow of bile and pancreatic juice into the small intestine. Neocholan helps to promote proper digestion and absorption of nutrients. It also encourages normal peristalsis by restoring intestinal tone.

Each tablet provides: Dehydrocholic Acid Compound, P-M Co. 265 mg. (Dehydrocholic Acid, 250 mg.); Homatropine methylbromide 1.2 mg.; Phenobarbital 8.0 mg. Supplied in bottles of 100 tablets.

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will pay for the cost of blood only if it is not replaced on a gratuitous basis. Physicians are asked to urge relatives and friends of the patient to donate blood as required, both as a matter of conservation of government funds and as good medical practice in assuring the availability of blood supplies.

In cases in which blood must be purchased, it must be purchased by a hospital and included on the hospital's claim for payment.

Purchase Limitations

When blood must be purchased, the government, under applicable statutes, cannot pay more than $50 for each withdrawal of blood from an individual. This limitation does not prevent payment of more than $50 for blood obtained from a blood bank, even though it may have been obtained in one withdrawal. The government, however, will not pay more for blood than the rate prevailing in the individual hospital or community in which the patient is receiving treatment.

When the hospital claims reimbursement for purchased blood, with charges of more than $50, the hospital must furnish a statement as to whether the blood was obtained from a blood bank or a paid individual donor. If from an individual donor, the hospital must further show the amount paid for each withdrawal. Excluding the service charge, any sum in excess of $50 paid for single withdrawal from an individual will not be reimbursed by the government.

ST. LOUIS ACADEMY TO PRESENT PROGRAM

"Modern Trends in Therapy" is the subject of a symposium to be presented by the St. Louis Academy of General Practice in cooperation with the medical schools of St. Louis University and Washington University at Hotel Chase, St. Louis, May 1, 1960. All doctors of medicine are invited to attend, as well as their wives. No fee is charged and five hours of Category I credit has been assigned the meeting by the American Academy of General Practice. The symposium was made possible by a grant from and with the cooperation of the Lederle Laboratories. The program follows.

Sunday, May 1, 1960

9:00 a.m. Registration—all day.
Moderator: Edward W. Dempsey, M.D., Dean, Washington University School of Medicine.

10:00 a.m. Lung Cancer, Alton Ochsner, M.D., New Orleans, Director of Surgery, Ochsner Clinic, and Professor of Surgery, Tulane University School of Medicine.

10:40 a.m. Angina Pectoris: The Fatal Attack in Good Hearts—Your Problem, Claude S. Beck, M.D., Cleveland, Professor of Cardiovascular Surgery, Associate Surgeon, Western Reserve University School of Medicine and University Hospitals.

11:20 a.m. Perivascular Disease, Richard C. Britton, M.D., Cleveland, Surgeon, Department of Vascular Surgery, Cleveland Clinic Foundation.

12:00 noon Questions and Panel Discussion.

12:45 p.m. Luncheon for physicians and wives, Khorassan Room, Chairman, Eugene W. Hall, M.D., President, St. Louis Academy of General Practice.
Speaker: Vernon E. Wilson, M.D., Columbia, Dean and Director, University of Missouri School of Medicine.
Moderator: James W. Colbert, M.D., St. Louis, Dean, St. Louis University School of Medicine.

2:30 p.m. What Is This Rash?, Robert F. Dickey, M.D., Danville, Pa., Director, Department of Dermatology and Syphilology, The George Geisinger Memorial Hospital, The Foss Clinic.

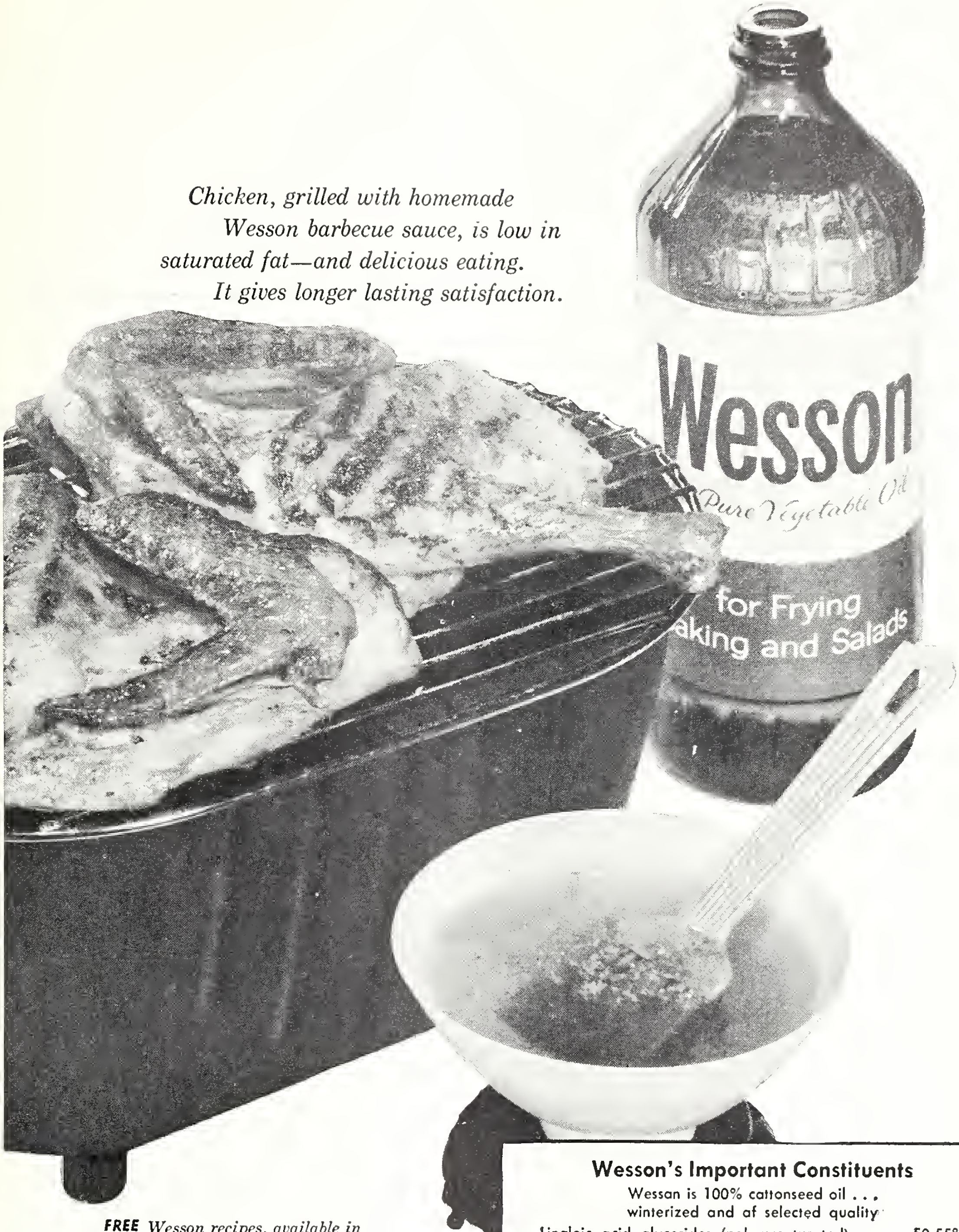
3:10 p.m. The Art of Diagnosis, Edmund F. Foley, M.D., Chicago, Professor of Medicine, University of Illinois College of Medicine; Attending Physician and Chief of Medicine, Cook County Hospital.

3:50 p.m. Recess for coffee.

4:05 p.m. Rehabilitation: The Role of the General Practitioner, Howard A. Rush, M.D., New York, Professor and Chairman, Department of Physical Medicine and Rehabilitation, New York University, Bellevue Medieal Center.

4:45 p.m. Questions and Panel Discussion.

5:30 p.m. to 6:30 p.m. Reception, Khorassan Room.



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It gives longer lasting satisfaction.*

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Linoleic acid glycerides (poly-unsaturated)	50-55%
Oleic acid glycerides (mono-unsaturated)	16-20%
Total unsaturated	70-75%
Palmitic, stearic and myristic glycerides (saturated)	25-30%
Phytosterol (predominantly beta sitosterol)	0.3-0.5%
Total tocopherols	0.09-0.12%

Never hydrogenated—completely salt free

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Correspondence

Dear Editor:

The magazine industry has a long and distinguished record of support for the public service campaigns of The Advertising Council. Among these, the Treasury's U. S. Savings Bonds campaign has received the most consistent coverage over the years ever since 1946.

Treasury Under Secretary Julian B. Baird, speaking before an audience of magazine publishers in New York recently, had this to say about our cooperation:

"As you have been told before, we prize this magazine campaign in a very special way. Not only does it contribute directly to our sales success, but it also lends an important prestige value to our program which is of great help to us in attracting outstanding men and women in every field and influencing them to serve as volunteers in our program. . . . So we are grateful to you all—for your many past and present contributions, and for the help which we hope you can give us in the future."

In passing along this tribute of the Treasury to our industry, may I also call to your attention a new series of Savings Bonds ads which will be available starting with April issues. As indicated in the attached folder, the messages are based upon the theme, "You Save More Than Money With U. S. Savings Bonds." In view of the part bonds play in sound management of the public debt and in building secure future for millions of families, this theme is both accurate and appropriate. The copy which goes with it—the work of the Leo Burnett agency—is good selling material, appealing to both patriotic and self-interest motives.

Last fall the President signed legislation raising the interest rate and otherwise improving the terms of both old and new Series E and H Bonds. In a special message on that occasion he said: "To my mind there is no better way of saving, no more effective way of strengthening our power for peace, than to own United States Savings Bonds. To buy these bonds is to express faith in America. . . ."

By the same token, your continued support of this important program for economic stability can be your way of expressing that faith. I know the Treasury will appreciate your responding to their offerings of electros for this interesting new Savings Bonds series.

Cordially,

Robert E. Kenyon, Jr., *President*

MISSOURI PHYSICAL THERAPY ASSOCIATION, INC.

The Missouri Physical Therapy Association will hold its annual meeting on April 23 and 24, 1960, at Springfield. The program follows:

April 23

Burge Hospital, Plaza Fountain Room

Registration
Business Meeting

April 24

St. John's Hospital, Conference Room

9:30 a.m. An Operative Procedure for Scoliosis, William H. Snead, M.D., and Erin M. Dillard, M.D., Orthopedic Surgeons
10:30 a.m. Break
11:00 a.m. Athletic Injuries: Diagnosis and Treatment, Frank D. Sundstrom, M.D., Orthopedic Surgeon
12:00 noon Lunch
1:30 p.m. The Aging: A Problem and a Challenge, Oreen Reudi, Ph.D., Professor of Sociology at Southwest Missouri State College, member of governors' committee on White House Conference on Aging; Mr. Ralph Longston, administrator, Sunshine Acres and Grand Acres nursing homes, and Mr. Bob Briggs, R.P.T., Burge Hospital
2:30 p.m. Medical Hypnosis, Lyman Brown, M.D.

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50 YEAR CLUB

The first meeting of the Fifty Year Club of the AMA will be held during the clinical session in Washington, D. C., November 29 to December 2, 1960, it has been announced by Dr. J. H. McCurry, Cash, Arkansas, who advises that he has received approval of the AMA for the organization of physicians who have been in practice fifty years or more. He is anxious to hear from those eligible for membership.

Squibb Announces

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Squibb Alpha-Phenoxyethyl Penicillin Potassium

new chemically improved penicillin which provides the highest blood levels that are obtainable with oral penicillin therapy

As a pioneer and leader in penicillin therapy for more than a decade, Squibb is pleased to make Chemipen, a new chemically improved oral penicillin, available for clinical use.

With Chemipen it becomes possible as well as convenient for the physician to achieve and maintain higher blood levels—with greater speed—than those produced with comparable therapeutic doses of potassium penicillin V. In fact, Chemipen is shown to have a 2:1 superiority in producing peak blood levels over potassium penicillin V.*

Extreme solubility may contribute to the higher blood levels that are so notable with Chemipen.* Equally notable is the remarkable resistance to acid decomposition (Chemipen is stable at 37°C. at pH 2 to pH 3), which in turn makes possible the convenience of oral treatment.

And the economy for your patients will be of particular interest—Chemipen costs no more than comparable penicillin V preparations.

Dosage: Doses of 125 mg. (200,000 u.) or 250 mg. (400,000 u.), t.i.d., depending on the severity of the infection. The usual precautions must be carefully observed with Chemipen, as with all penicillins. Detailed information is available on request from the Professional Service Department.

Supply: Chemipen Tablets of 125 mg. (200,000 u.) and 250 mg. (400,000 u.), bottles of 24 tablets. Chemipen Syrup (cherry-mint flavored, nonalcoholic), 125 mg. per 5 cc., 60 cc. bottles.

*Knudsen, E. T., and Rolinson, G. N.: Lancet 2:1105 (Dec. 19) 1959.

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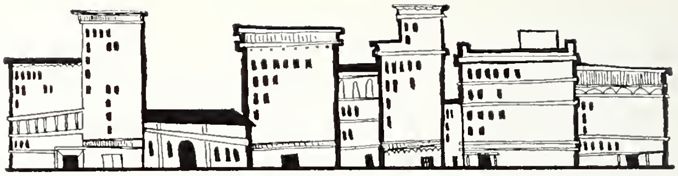


UNIVERSITY OF MISSOURI

Meetings and Talks

The Seventh District Nurses Association met at the Medical Center on January 21. Mrs. Ruth Kroth, instructor in nursing, spoke on "Some Impressions of Nursing in Egypt" and illustrated her talk with slides. A short business meeting was held, and refreshments were served in the hospital cafeteria. Members were present from Columbia, Mexico, Moberly, Macon, Fulton, and Jefferson City.

The monthly meeting of the Boone County Medical Society was held February 2 in the Medical Center Auditorium.

Guest lecturer for the Sigma Xi lecture series, which was held in the Medical Center Auditorium on February 18, was Dr. C. J. Alexopoulos, who is head of the Department of Botany at the University of Iowa. Dr. Alexopoulos spoke on "The Role of Myxomycetes as a Biological Tool."

A Capping Ceremony for Practical Nurses was held in the Auditorium on Friday, February 19. The 18 students were capped by Miss Barbara Jackson, instructor in nursing, who was assisted by Mrs. Georgeann Larson, supervisor instructor. The welcome was extended by Mr. Ray Walsh, who is director of the Columbia Public School of Practical Nurses and the speaker for the occasion was Dr. Vernon E. Wilson, Dean of the School of Medicine. A reception followed the ceremony in the Post-Graduate Lounge.

Tours

During the last month several groups toured the Medical Center, including a group of Gray Ladies on January 25, a large group of farmers who were the recipients of the East Missouri Balanced Farming Awards on February 6, and on February 13, a group of Boy Scouts.

Trips and Talks by the Faculty

On January 22 Dr. Vernon E. Wilson, Dean of the School of Medicine and Director of the University Hospital, attended a meeting of the Planning Committee of the Missouri Council of Churches which was held in Jefferson City, for the purpose of planning a state conference for the Missouri Council of Churches which is scheduled to be held October 10 and 11, 1960, in Jefferson City.

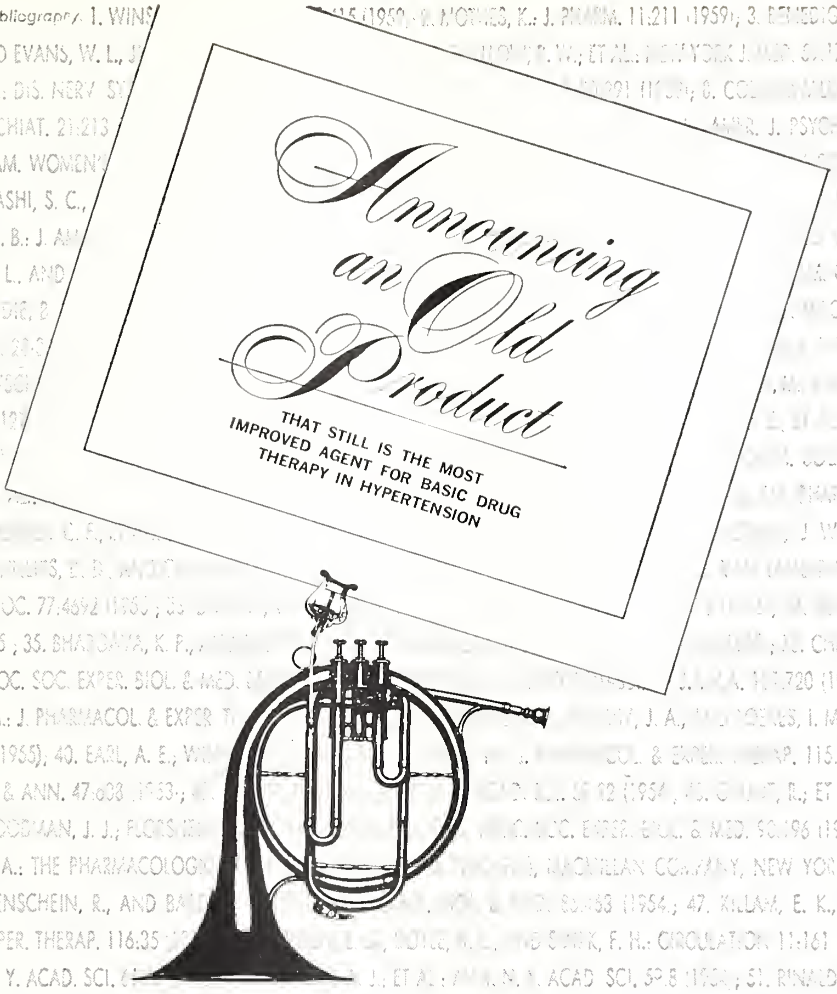
Dr. Wilson recently participated as a member of the Accrediting Committee of the Council on Education of the American Medical Association and the Association of American Medical Colleges for the accreditation of the University of Florida School of Medicine in Coral Gables, Florida, where he visited during the week of January 24.

On January 31 members of the Medical Advisory Committee met in the Dean's Office to discuss the possibility of having a special medical alumni periodical and the establishment of an annual "M.D. Day." Those in attendance were: Dr. Wilson; Dr. Gwilym Lodwick, Associate Dean; Mr. John Perry, Associate Director of the Hospital; Dr. John McHaney of Jefferson City; Dr. Joseph Fisher of St. Joseph; Dr. Walter Tillman of Springfield; Dr. H. M. Hardwicke of Jefferson City; Dr. Ralph Perry of Kansas City; Dr. Fred Kyger of Kansas City; and Dr. Cecil Leitch of Blue Springs.

During the month of February Dr. Wilson attended the 56th Annual Congress on Medical Education and Licensure sponsored by the American Medical Association and held in Chicago, and a meeting of the Council of the Missouri State Medical Association which was held in St. Louis. On February 12 Dr. Wilson and Dr. Philip Hitchcock, associate professor of anesthesiology, attended a dinner meeting in Butler, Missouri, of the Five-County Medical Society. Dr. Hitchcock spoke on "Latest Developments in Anesthesiology."

On January 13 Dr. Lodwick, Associate Dean, attended a meeting of the Committee on Education and of the Board of Directors of the Leukemia Guild in St. Louis.

Dr. Arnold A. White, assistant professor of biochemistry, participated in a Symposium on Parathyroid Research sponsored by Rice Institute and held in Houston, Texas, February 1-5. Others attending the symposium from the University of Missouri were Dr. Constantine Anast and Dr. Fikri Hanna, assistant professors of pediatrics, who presented a summary of their re-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Rautensin bibliography: 1. WRIGHT, W. T., JR.; POKORY, C., AND FOSTER, T.: AM. PRACT. & DIGEST. TREAT. 7:1992, 1956. 2. SUCKLE, E.: GERIATRICS 11:509, 1956. 3. FINCH, W. J.: J. OKLAHOMA M.A. 50:259, 1957. 4. TERMAN, L. A.: ILLINOIS M. J. 3:67, 1957. 5. GIFFORD, R. W.: J. ARKANSAS M. SOC. 55:31, 1958. 6. FORD, R. V., AND MOYER, J. H.: POSTGRAD. MED. 23:41, 1958.

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cent work on the metabolism of calcium, phosphorus, magnesium and parathyroid hormone.

On February 3 Dr. James T. Barrett, associate professor of microbiology, spoke to a group of students at West Boulevard School in Columbia on "Bacteria and Microbiology."

Dr. Michael H. Ivey, assistant professor of microbiology, recently spoke at a meeting of the Christian Medical Student Society on "Christian Development," which was followed by a discussion period.

A workshop, sponsored by the College of American Pathologists and entitled "Workshop on the Professional Problems of the Pathologist" was held in St. Louis January 23 and 24. Attending from the University of Missouri were Dr. Joseph E. Flynn, professor and chairman of the Department of Pathology; Dr. Ira Godwin, instructor; Dr. John Porterfield, assistant instructor; and Dr. Victor Carnes, assistant instructor and resident.

Dr. Porterfield also attended a meeting on January 15 and 16 in Iowa City, Iowa. The meeting was sponsored by the Midwest Ophthalmic Pathology Club, and cases of ophthalmic pathology were presented, with discussions and demonstrations.

Dr. Robert Jackson, professor and chairman of the Department of Pediatrics, attended a postgraduate course on Diabetes and Basic Metabolic Problems, which was held in Los Angeles January 20-22 and was sponsored by the American Diabetes Association in cooperation with the Schools of Medicine of the College of Medical Evangelists, the University of California at Los Angeles and the University of Southern California. Dr. Jackson participated in a round table discussion on "Diabetes in Children." While in Los Angeles Dr. Jackson also met with a committee of the National Institutes of Health for the purpose of reviewing training grants and special research fellowships. On February 5 and 6 Dr. Jackson attended a meeting in Washington, D. C., of the Infant Nutrition Committee of the National Research Council, of which he is chairman. The committee discussed protein requirement in infant nutrition.

Dr. Gwilym S. Lodwick, professor and chair-

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man of the Department of Radiology, and Dr. Theodore Keats, professor of radiology, attended the annual radiology teachers conference, which was sponsored by the American College of Radiology, and held in New Orleans February 2-7. While in New Orleans Dr. Lodwick also visited Tulane School of Medicine for consultation on research problems.

On his recent visit to Bothwell Hospital in Sedalia, Dr. Hugh E. Stephenson, Jr., professor and chairman of the Department of Surgery, demonstrated the use of the Electrical Defibrillator and Electric Pacemaker of the heart to the hospital staff. On February 11 Dr. Stephenson participated in a panel discussion on "The Surgical Risk in Heart Disease" at a meeting of the Milwaukee County Medical Society and afterwards visited Children's Hospital.

Dr. John Buesseler, associate professor of ophthalmology, attended an Eye Study Club in Nassau January 18-26.

Dr. Ian Thompson, associate professor of urology, attended the meeting of the Texas Urological Society held in Waco, Texas, January 22-24.

Dr. Carl Almond, assistant professor of surgery, spoke at a meeting of the St. Charles County Medical Society on January 19 on "Management of Metastatic Breast Carcinoma."

During the week of February 8 Dr. John Lander, assistant professor of surgery, attended the John and Mary R. Markle Foundation meeting held in Colorado Springs, Colorado.

At the January 19 meeting of the Marion-Ralls-Shelby County Medical Society in Hannibal, Dr. Philip Hitchcock, associate professor of anesthesiology, presented a talk on "Recent Advances in Anesthesiology," which was followed by a question and answer session.

A recent guest in the Department of Surgery was Dr. Raymond M. Curtis, plastic surgeon at Johns Hopkins University School of Medicine and former University of Missouri School of Medicine student. Dr. Curtis spoke to medical students, house staff, faculty and visitors on "Methods and Advantages of Reconstruction at the Time of the Repair of Acute Hand Injuries." Other guests in the department recently included Dr. Frank Allbritten, Jr., professor and chairman

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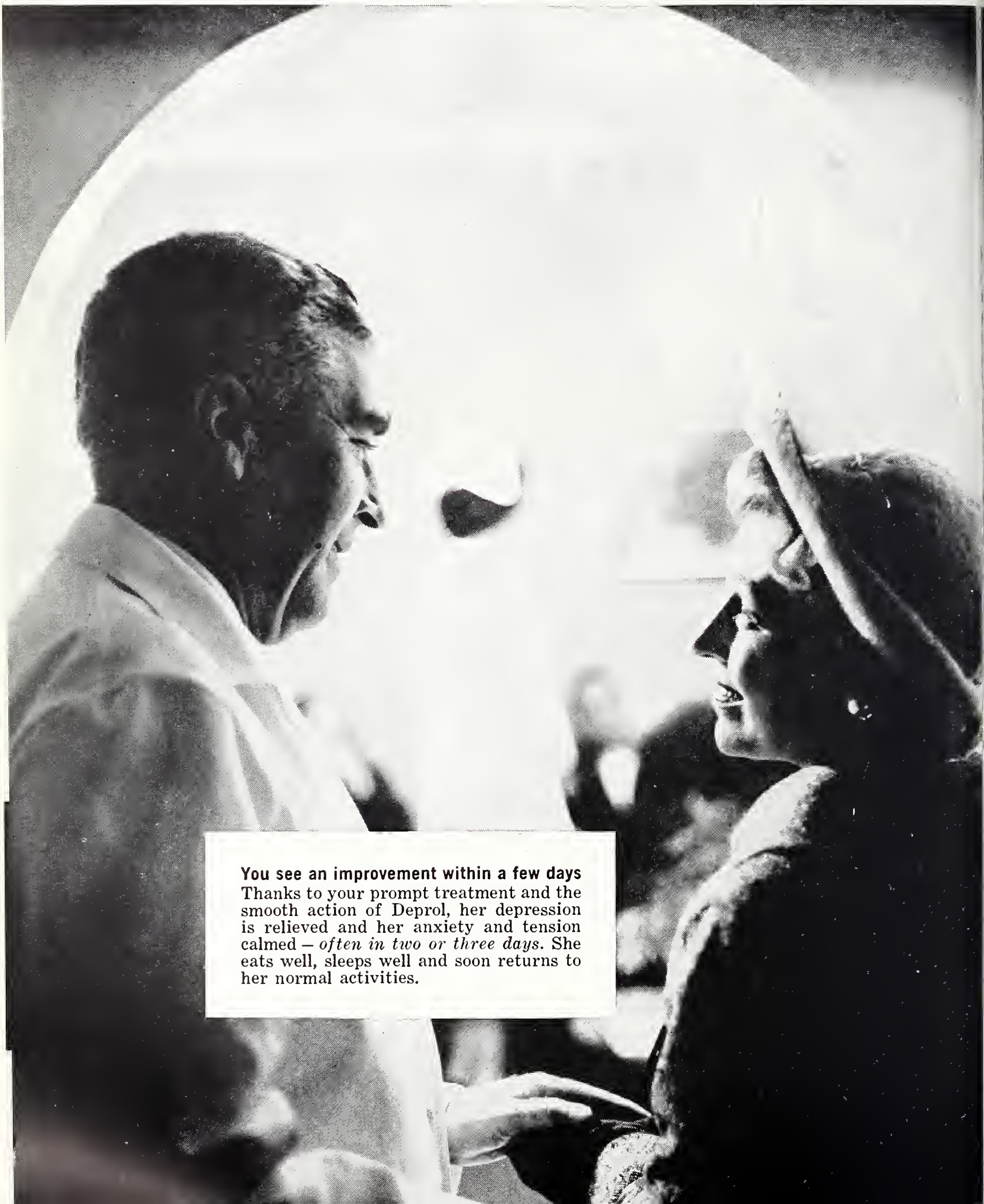
Lifts depression.



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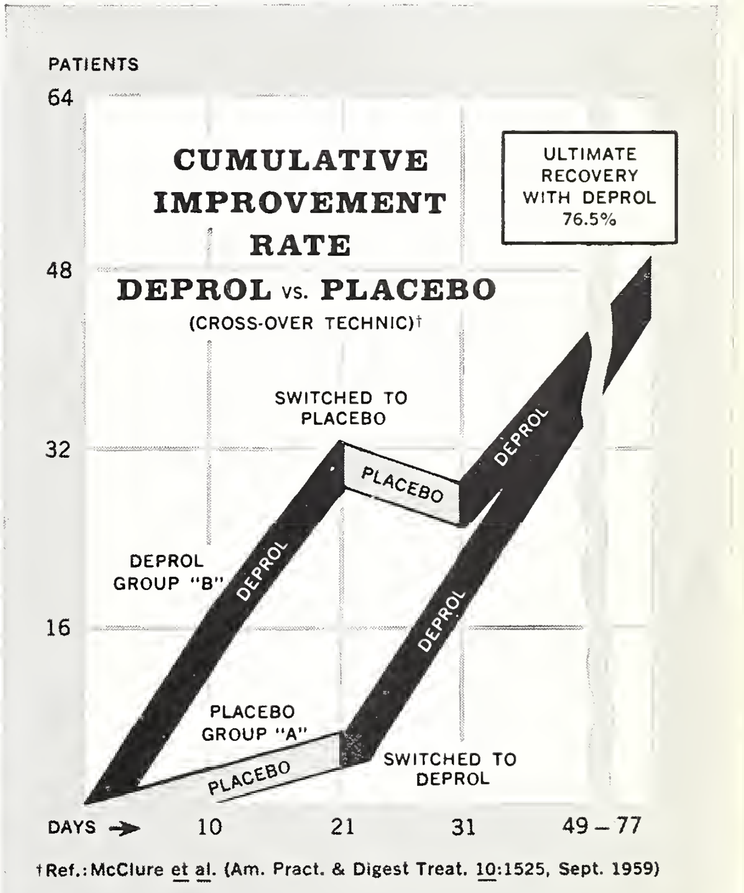

†Ref.: McClure et al. (Am. Pract. & Digest Treat. 10:1525, Sept. 1959)

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of the Department of Surgery at the University of Kansas Medical Center; Dr. Charles Lockhart of Springfield; and Dr. Bart Wooldridge of Joplin, who conducted guest grand rounds on surgery patients.

Gifts and Grants

Merck, Sharp and Dohme have been the donors of a $3,500 grant to the University of Missouri School of Medicine providing for unrestricted use by the School of Medicine for Postgraduate Programs.

A grant providing for Training in Cardiovascular Research has been awarded by the Department of Health, Education and Welfare in the amount of $25,056. Dr. C. Thorpe Ray, professor and chairman of the Department of Medicine, will be project director.

The G. D. Searle and Company of Chicago have provided for a grant of $5,659 to be awarded for "Studies on the Sodium 22 Space in Normotensive and Hypertensive Subjects," with Dr. Ray as project director.

An Undergraduate Teaching Grant in Cancer in the amount of $25,000 from the Department of Health, Education and Welfare has been announced, with Dr. Joseph Flynn, professor and chairman of the Department of Pathology, as project director.

Dr. Gwilym S. Lodwick, as MEND Coordinator, has been named the director for a $3,550 grant from the Department of the Navy for use in the Medical Education for National Defense (MEND) Program.

Grants from the Department of Health, Education and Welfare have also been made available to Dr. John Landor, assistant professor of surgery, for research in "The Role of the Pancreas in Control of Gastric Secretion" in the amount of $15,200; Dr. J. Randall, associate professor of physiology and biophysics, for "Stochastic Properties of a Vascular System" in the amount of $12,375; Dr. Arnold White, assistant professor of biochemistry, for "Biochemical Study of Osteogenesis in Bone Cultures" in the amount of $12,190; and Dr. A. Merrick, associate professor of physiology for "Glycogen Fractions of Cardiac and Nervous Tissue" in the amount of $5,750.

New Appointments

James E. Bumgarner, M.D., has been appointed Clinical Instructor in Urology, effective January 1, 1960. Dr. Bumgarner received his B.S. in 1942 from the University of Missouri and his

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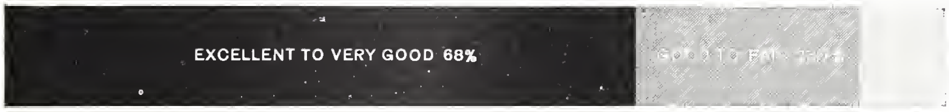

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1. Kestler, O.: In The Pharmacology and Clinical Usefulness of Carisoprodol, Wayne State University Press, Detroit, 1959. 2. Berger, F. M.; Kletzkin, M.; Ludwig, B. J.; Margolin, S., and Powell, L. S.: J. Pharm. Exp. Ther. *127*:66 (Sept.) 1959. 3. Spears, C. E. and Phelps, W. M.: Arch. Pediat. *76*:287 (July) 1959. 4. Phelps, W. M.: Arch. Pediat. *76*:243 (June) 1959. 5. Friedman, A. P.; Frankel, K., and Fransway, R. L.: Papers presented at Scientific Meeting, New York State Society of Industrial Medicine, Inc., New York, Sept. 30, 1959. 6. Kuge, T.: Unpublished reports. 7. Ostrowski, J. P.: Orthopedics *2*:7 (Jan.) 1960.

Literature and samples on request

Also available on request: The Pharmacology and Clinical Usefulness of Carisoprodol, Wayne State University Press, Detroit, 1959. (185 pages)

SOMA T. M.

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M.D. in 1945 from Northwestern University Medical School.

Herbert L. Warres, M.D., has been appointed Clinical Instructor in Urology, effective January 15, 1960. Dr. Warres received his M.D. in 1943 from the Medical College of Virginia and his M.Sc. in urology in 1951 from the Graduate School of Medicine at the University of Pennsylvania. He is a Fellow of the American College of Surgeons and the American Board of Urology.

Howard D. Adams, M.D., has been appointed Assistant Instructor and Second Year Resident in Medicine effective September 1, 1960. Dr. Adams received his A.B., B.S., and M.D. degrees from the University of Missouri, the latter in 1957. He is presently in active military duty in the U. S. Naval Hospital at Camp Pendleton, California.

Robert W. Moellenhoff, M.D., has been appointed Assistant Instructor in Pathology effective July 1, 1960. Dr. Moellenhoff received his A.B. in 1955 from Washington University and his M.D. in 1959 from the University of Missouri. He is presently serving a rotating internship at St. Louis City Hospital No. 1.

WASHINGTON UNIVERSITY

Grants

Washington University School of Medicine has received $152,020 in new research grants from the United States Public Health Service. Largest new grant of $54,741 was awarded Dr. Herman N. Eisen, professor of medicine in dermatology, for a study of antibodies and allergic skin reactions. Associated with Dr. Eisen in the research project are Dr. Ernst Helmreich, assistant professor of biochemistry in medicine; Dr. Milton Kern, assistant professor of medicine, and Ernest Simms, research assistant in medicine.

Dr. E. James Anthony, Blanche F. Ittleson professor of child psychiatry and director of the William Greenleaf Eliot Division of Child Psychiatry, received $32,352 to study effects of perinatal anoxia seven years after birth. In a previous five-year Washington University study, it was shown that initially such children develop intellectual and physical deficits. In the new study, Dr. Anthony and his associates hope to prove that these deficits are compensated for during the course of the child's development, although he retains a degree of increased sensitivity and shows evidence of greater anxiety and tension than the seven-year-old who received a sufficient amount of oxygen. Assisting in the research will be Dr. Alexis F. Hartmann, Sr., professor and head of the department of pediatrics; Dr. Don L. Thurston, associate professor of pediatrics; Dr. John A. Stern, associate professor of medical psychology, and Dr. Claire B. Ernhart, research instructor in pediatrics and medical psychology.

A new grant of $26,119 was awarded Dr. David M. Geller, instructor in pharmacology, to support a project dealing with photophosphorylation in biological systems.

Dr. Michel Ter-Pogossian, associate professor of radiophysics, was awarded $15,000 to conduct physiological studies with radioactive oxygen-15.

An $11,012 grant to Dr. Stephen C. Kinsky, instructor in pharmacology, will be used to initiate a research program on the effects of various nutrients on enzyme production in micro-organisms.

A new grant of $9,561 to Dr. Gerald M. Lehrer, post-doctoral fellow in pharmacology will provide funds for a study of the chemistry of neurologic tumors.

Dr. Justin J. Cordonnier, professor of urology, received a new grant of $3,235 for a special study of the pathologic spread of bladder cancer.

Dr. Robert K. Crane, associate professor of biological chemistry, has received $31,300 from the National Science Foundation to study the utilization of hexoses by animal cells.

Meetings

Washington University Medical Society presented a symposium on muscle at the January meeting and a discussion on temperature and the activity of the heart in February. During the January meeting, the molecular basis of muscle contraction was discussed by Dr. Sidney F. Velick, associate professor of biological chemistry; Dr. Carl F. Cori, professor and head of the department of biological chemistry, spoke on metabolism and energy supply of skeletal muscle and Dr. Paul Horowicz, assistant professor of physiology, described the electrical and mechanical properties of muscle. In February, the principle address was given by Dr. Harold Burn, professor of pharmacology at Oxford University, England. He discussed an experimental approach to cardiac fibrillation and the effects of temperature. Dr. Burn, who had been visiting professor of pharmacology at Washington University School of Medicine for the past year, returned to England on March 1. Introductory remarks at the February meeting were given by Dr. John Smith, professor of medicine, who discussed the activity of the myocardium. Dr. David Goldring, professor of pediatrics, spoke on the selection of patients for hypothermia and Dr. John Shields, professor of anesthesiology, described the management of surgical patient under hypothermia.

Lectures

Dr. Robert Greenhill Cochrane, technical medical advisor to American Leprosy Missions, Inc., and Leprosy Adviser to the Ministry of Health, United Kingdom, delivered a Medical Education for National Defense Lecture in February. He discussed leprosy as a present day world challenge. The son of Thomas Cochrane, founder of the Union Medical School in Peiping, he was born in China, and began leprosy work in India under the London Mission to Lepers in 1924. He was formerly chief medical officer of the Lady Willingdon Leprosy Sanatorium in Chingleput, South India; principal of the Christian Medical College in Vellore, South India, and honorary director of the anti-leprosy campaign sponsored by the government of Madras, India.

An MEND lecture was also given by Dr. David Allbrook, visiting associate professor of anatomy at Washington University School of Medicine. He discussed medical schools and medical education in the new Africa. Dr. Allbrook has been senior lecturer and reader in anatomy at Makerere, the University College of East Africa, since 1952. He helped to initiate and maintain the Makerere Student Health Service and Poliomyelitis Clinic and is curator and chairman of the Medical School Museum there.

Dr. Maurice Victor, associate in neurology at Harvard Medical School, lectured on the Wernicke-Korsakoff Syndrome and discussed the anatomic basis of memory at a February lecture held in conjunction with a meeting of the St. Louis Society for Neurology and Psychiatry. Preceding the lecture, Dr. Victor visited various departments at the School of Medicine as guest of Dr. Eli Robins, professor of psychiatry, and program chairman of the St. Louis Society for Neurology and Psychiatry.

Dr. Carl V. Moore, professor and head of the department of medicine at Washington University, discussed iron metabolism and iron-deficiency anemia at the annual Jack N. Tritt Memorial Lecture held in February at Jewish Hospital, St. Louis. The Tritt lectures are given in memory of a former Jewish Hospital intern and resident in medicine who died in 1941 at the age of 31.

Memorial Program

A memorial program in honor of Dr. Richard T. Odell, Washington University orthopedic surgeon who died June 21 at the age of 46, was held in February in Wohl Hospital auditorium at the Medical Center. A portrait of Dr. Odell was presented to the Barnes Hospital board of trustees by his family.

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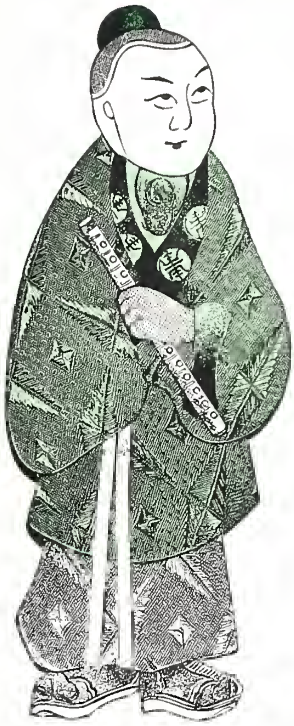

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Founders Day

Dr. Robert J. Terry, professor emeritus of anatomy at the Medical School, was among those receiving faculty awards at the Washington University Founders Day program in February. Dr. Wendell Scott, professor of clinical radiology, was awarded an alumni citation.

ST. LOUIS UNIVERSITY

Appointment

John H. Coggeshall has been appointed assistant director of Firmin Desloge Hospital, the main teaching hospital of the St. Louis University School of Medicine. Mr. Coggeshall was formerly associated with Holy Cross Hospital, administered by the Sisters of St. Francis in Detroit, Mich. He was appointed assistant administrator there in 1957 advancing to senior assistant administrator in 1959. Prior to that time, he was associated with the City of St. Louis Hospital division as administrative assistant to the late Dr. W. E. Hennerich. Mr. Coggeshall was an administrative resident from 1955 to 1956 and an administrative assistant from 1956 to 1957. He was awarded his master's degree in hospital administration from St. Louis University in 1956. He received his bachelor of science degree from Central College in Fayette, Missouri in 1951. From 1951 to 1953 he served in the Army Medical Corps and was stationed at Murphy Hospital in Waltham, Mass.; Brook General Hospital in San Antonio, Tex., and Valley Forge Hospital in Phoenixville, Pa.

Grant Awards

Recent grant awards to the department of pharmacology total $131,269. Dr. Elijah Adams, director of the department of pharmacology, has been awarded a $36,000 grant by the National Science Foundation for the support of basic research entitled "Enzymatic Degradation of Pharmacologically Active Compounds."

Dr. Harold L. Segal, assistant professor of pharmacology, has been awarded two grants totaling $66,629 from the United States Public Health Service. He received an award amounting to $39,662 for studies of pathways of sulphate metabolism in living tissues and an award amounting to $26,967 to aid in a better understanding of how living tissues work.

Dr. Clark Bublitz, senior instructor in pharmacology, has been awarded a $28,640 grant for

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Lectures

Dr. Jack Metcoff, professor of pediatrics at Northwestern University, delivered the annual lecture sponsored by the Phi Rho Sigma medical fraternity January 25. Dr. Metcoff, a research authority in the field of electrolyte and renal physiology, lectured on "The Artificial Kidney." Dr. Metcoff has been associated with the Northwestern University School of Medicine since 1956. Since that time he has also served as Chairman of the Department of Pediatrics and Director of Pediatric Research at Michael Reese Hospital in Chicago. The lecture honored the late Dr. William F. Alexander, associate professor of anatomy at the School of Medicine, who died November 29. Dr. Alexander conducted research on vitamin K and the autonomic nervous system.

Dr. Daniel C. Darrow, professor of pediatrics at the University of Kansas School of Medicine, delivered the annual John Auer Lecture sponsored by the Phi Beta Pi medical fraternity February 19. Dr. Darrow's lecture was entitled "The Pathogenesis of Metabolic Alkalosis." Dr. Darrow was awarded his bachelor of arts degree from Cornell University and his doctor of medicine degree from Johns Hopkins University in 1920. After interning at New Haven, Conn. Hospital, he was a resident at Boston City Hospital Pediatric Service. He began his teaching career as an instructor in pediatrics at Washington University School of Medicine in 1925, moving on to Yale University School of Medicine, where he was appointed assistant professor in 1928, associate professor in 1937 and full professor in 1947. He joined the medical faculty at the University of Kansas School of Medicine in 1954. The John Auer Lecture was established in 1944 in recognition of Dr. John Auer's outstanding contribution to pharmacology both as a researcher and teacher in his specialty. Dr. Auer was a professor of pharmacology and director of the department of pharmacology at St. Louis University for 27 years until his death in 1948.

Honored

Dr. Calvin A. Richins, associate professor of anatomy, was awarded a $500 bond by his former graduate students in orthodontics in appreciation of his services as a teacher of anatomy at a banquet held at the Chase Hotel February 29 by the Orthodontic Foundation for Education and Research. Dr. Richins is now engaged in his 13th year of teaching in the graduate program in orthodontics at the University. The presentation was made to Dr. Richins by Dr. John Callahan, President of the University's Orthodontic alumni. The banquet was attended by 150 orthodontists from 25 states throughout the nation.

Genetics Study Guide

A St. Louis University geneticist has compiled a comprehensive handbook to aid college students in studying genetics over television. The handbook entitled *Study Guide and Workbook for Genetics* was written by Dr. Irwin H. Herksowitz, associate professor of biology at the University. It was published by the McGraw-Hill Book Company, Inc. and has been distributed nationally. The exhaustive handbook is directed toward 48 featured film lectures being presented over educational television station KETC. The films feature 15 of the nation's leading geneticists. The book replete with pre-lecture assignments, lecture notes, post-lecture notes and scientific drawings illustrating the film series is being used as a companion guide throughout the entire course, which began February 8.

Elections

Dr. John P. Wyatt, professor of pathology and associate director of the department, has been appointed a member of the new American Trudeau Society Committee on Diagnostic Standards in Nontuberculosis Respiratory Diseases.

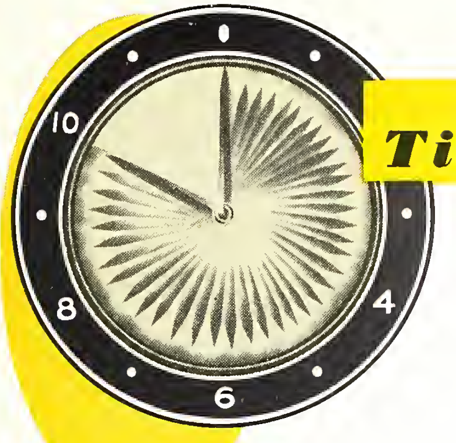
Dr. Raymond O. Muether, associate professor of internal medicine, has been elected president of the St. Louis Blue Shield medical-surgical protection plan.

WOMAN'S AUXILIARY

(Continued from page 424)

to the two men to commend them for their devotion. "Oh," said one of the men, "We were just waiting to take down the tent."

We appreciate the position of the evangelist, for we know that copies of Missouri Medicine do not always find their way home from the doctors' offices and the audience is, therefore, small. But to those who have read this through, few though you may be, we make the request that you take to your auxiliaries the thought of the great and the small endeavors that all go together to make up an Auxiliary year. Being informed on pertinent legislation and saying the right words in the right places, knowing how to protect your family from radioactive fallout and informing your fellow townsmen, and informing the laymen through such valuable films as "The Medicine Man" may do just as much good in Smalltown as it will do in Metropolis.



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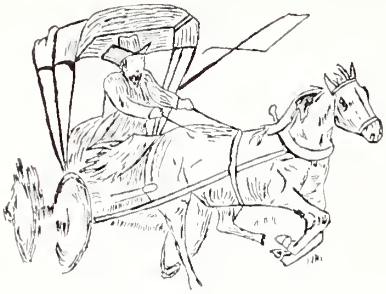
LEO H. POLLOCK, M.D.

Missouri Medicine in Review



FORTY YEARS AGO

St. Louis was honored in 1897 when Dr. Theodore F. Prewitt was chosen president of The American Surgical Association. In the list of Fellows now deceased, besides Dr. Hodgen and Prewitt, appear the names of Drs. Elisha H. Gregory, Henry H. Mudd, and Frank J. Lutz. The Active Fellows from Missouri are Drs. N. B. Carson, Harvey G. Mudd, Major G. Seelig, and Vilray P. Blair of St. Louis, and J. F. Binnie and Jabez N. Jackson of Kansas City. This is the Association's first return to St. Louis since the meeting held in 1904. Dr. John F. Binnie of Kansas City is one of the vice presidents of the Association, the president being Dr. George E. Brewer, Professor of Surgery in the College of Physicians and Surgeons, Columbia University. Dr. H. G. Mudd is chairman of the committee of arrangements.

Dr. E. Lee Myers of St. Louis has resigned from the staff of the St. Louis College of Physicians and Surgeons.

Dr. A. W. McAlester and Dr. Woodson Moss of Columbia have been elected honorary active members of Boone County Medical Society in recognition of their long and distinguished service in the profession and as an expression of the esteem in which they are held by the members of the society.

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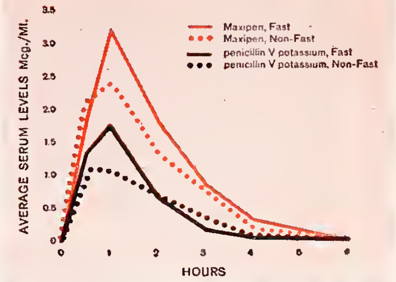

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of the pathologic building of the Johns Hopkins University, the records and valuable data gathered during the last two years in research on the cause and effect of influenza made by Dr. Thomas M. Rivers, were lost, and the laboratories of Dr. Bayne Jones and Dr. Lloyd D. Felton, containing important apparatus and data, were destroyed.

The Illinois Central Railroad is the only line out of St. Louis carrying through cars to New Orleans for the meeting of the American Medical Association. The fare for the round trip is $41.06, if purchased before April 30.

TWENTY-FIVE YEARS AGO

Kansas City, through the Jackson County Medical Society, has invited the American Medical Association for the 1936 session.

The Seventy-Eighth Annual Session of the Missouri State Medical Association will meet in Excelsior Springs, May 6, 7, 8 and 9. All general sessions will be held in the Elms Hotel in the Ballroom on the main floor.

Four members of the class of 1881 of the St. Louis Medical College celebrated the fifty-fourth anniversary of their graduation on March 3 at the home of one of the members, Dr. Willis Hall, St. Louis. Five members of the class, which originally numbered forty-three, survive. Those attending the anniversary meeting were Dr. Hall, Dr. James A. Dickson, Dr. Amand Ravold and Dr. Max C. Starkloff, all of St. Louis. Dr. William A. James, Chester, Illinois, the fifth member, was unable to attend. Two members of the class, Dr. Harvey G. Mudd and Dr. Henry J. Harnisch, St. Louis, have died during the last year.

TEN YEARS AGO

F. G. Thompson, M.D., St. Joseph, is being honored by a lectureship established in honor of his sixty years of practice by the Thompson, Brumm, and Knepper Clinic, St. Joseph.

DIVISION OF HEALTH

(Continued from page 420)

poliomyelitis, however, is not indicative of vaccine failure. Ninety per cent of the paralytic cases reported in Missouri in 1959 were in inadequately vaccinated persons, and the vaccine is still estimated to be 90 per cent effective in preventing paralytic disease.

How may immunization coverage be raised to optimum or acceptable levels? This is a joint responsibility of practicing physicians, public health officials and parents. Local, district and state public health physicians and nurses are eager to help solve this problem and welcome opportunities to assist physicians. Standard vaccines, other than poliomyelitis vaccine, are available through local and district health offices for use in clinics or physicians' offices for medically indigent patients. Educational materials are likewise available.

Physicians can accomplish a great deal by reminding parents routinely about immunization and by emphasizing early protection.

In all probability, an adequate job will be done only if a planned, continuous, cooperative program is carried out at the county or local level. Human nature being as it is, some parents—and some physicians—will probably best be motivated by well publicized annual drives.

Although school immunization clinics represent a relatively simple and economic approach to the problem of protecting school age children, such programs cause many parents to postpone immunization until their children reach school age. It is evident that concentration must be on immunization or vaccination in infancy if maximum benefits from these procedures are to be attained.

Proceedings
of the
102nd Annual Session
Missouri State Medical Association
will appear in
the July, 1960, issue

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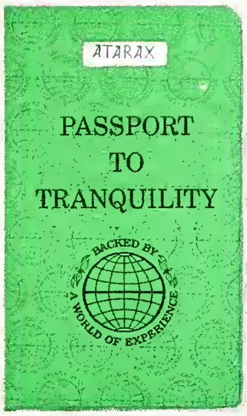

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IN ELDERLY PATIENTS well tolerated by debilitated patients	"...seems to be the agent of choice in patients suffering from removal disorientation, confusion, conversion hysteria and other psychoneurotic conditions occurring in old age." Smigel, J. O., et al.: J. Am. Geriatrics Soc. 7:61 (Jan.) 1959.	Settel, E.: Am. Pract. & Digest Treat. 8:1584 (Oct.) 1957. Negri, F.: Minerva med. **48**:607 (Feb. 21) 1957. Shalowitz, M.: Geriatrics **11**:312 (July) 1956.
IN ALLERGIC PATIENTS useful adjunctive therapy for asthma and dermatosis; particularly effective in urticaria	"All [asthmatic] patients reported greater calmness and were able to rest and sleep better...and led a more normal life.... In chronic and acute urticaria, however, hydroxyzine was effective as the sole medicament." Santos, I. M., and Unger, L.: Presented at 14th Annual Congress, American College of Allergists, Atlantic City, New Jersey, April 23-25, 1958.	Eisenberg, B. C.: J.A.M.A. **169**:14 (Jan. 3) 1959. Coirault, R., et al.: Presse méd. **64**:2239 (Dec. 26) 1956. Robinson, H. M., Jr., et al.: South. M. J. **50**:1282 (Oct.) 1957.
IN HYPEREMOTIVE ADULTS does not impair mental acuity	"...especially well-suited for ambulatory neurotics who must work, drive a car, or operate machinery." Ayd, F. J., Jr.: New York J. Med. **57**:1742 (May 15) 1957.	Garber, R. C., Jr.: J. Florida M. A. 45:549 (Nov.) 1958. Menger, H. C.: New York J. Med. 58:1684 (May 15) 1958. Farah, L.: Internat. Rec. Med. **169**:379 (June) 1956.

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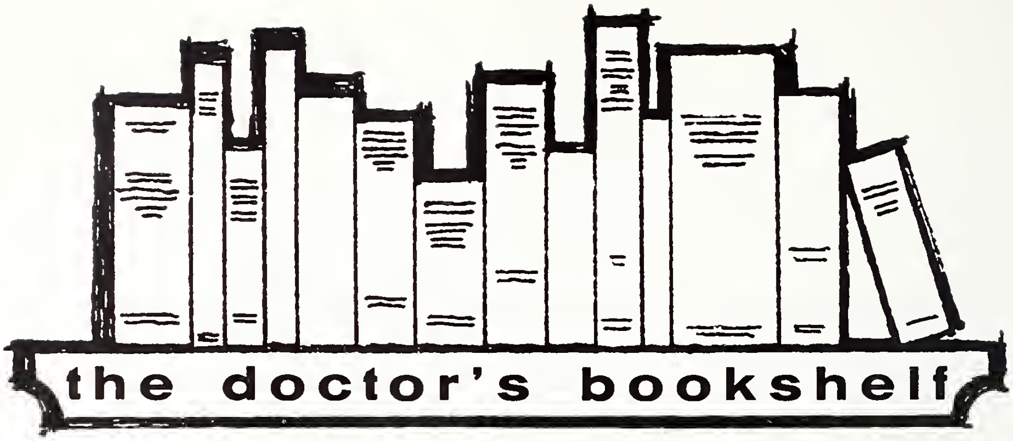

the doctor's bookshelf

BOOK REVIEWS

The Ecology of Human Disease, by Jacques M. May, M.D., Director, Medical Geography Department, American Geographical Society, New York. Foreword by Felix Marti-Ibanez, M.D., Professor and Director, Department of the History of Medicine, New York Medical College, Flower and Fifth Avenue Hospitals, New York; Editor-in-Chief of *M.D. Medical News.* M.D. Publications, Inc., New York, 1959. Price $7.50.

This study is the first volume of a three volume work, and concerns itself with the more common communicable diseases in the world. This is a study in medical geography. It presents a world-wide coverage of diseases in relation to countries and their specific environmental factors which play a part in the dissemination and spread of the disease process. It concerns itself with external factors (climate, population) and not the internal factors in the development of the communicable diseases. It is a comprehensive study in the ecology of communicable diseases.

R. W. L.

Technic and Practice of Psychoanalysis, by Leon J. Saul, M.D., Professor of Clinical Psychiatry, Medical School of the University of

(Continued on page 546)

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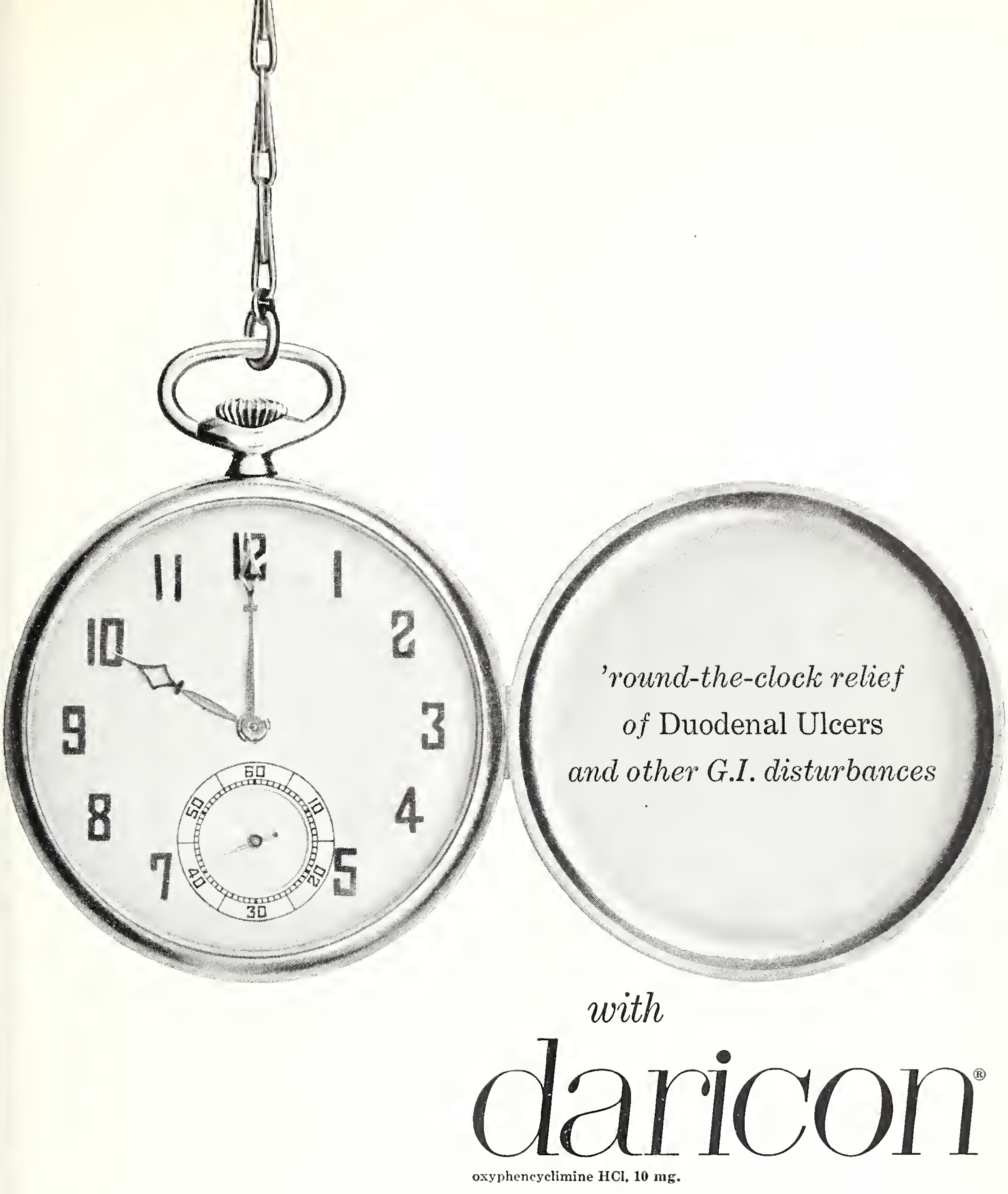

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Winkelstein, A.: Am. J. Gastroenterol. *32*:66-70 (July) 1959.

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THE DOCTOR'S BOOKSHELF

(Continued from page 522)

Pennsylvania; Training Analyst, Philadelphia Psychoanalytic Institute; Psychiatric Consultant, Swarthmore College. J. B. Lippincott Company, Philadelphia, Montreal. Price $8.00.

Dr. Saul, in his usual clear style, discusses the practical application of psychoanalytic technic and its relationship to basic analytic theory. He underlines and emphasizes the need to quickly understand the patient and the dynamics that are at work in the production of symptoms. He has much of practical value to say and his clinical examples are exceptionally well done. His conception of basic conflicts, however, is concerned mainly with the themes of dependence, inferiority, loneliness, after-education, and corrective emotional experience, so that the roles of unconscious conflicts and compromise formation in the development of symptoms are neglected.

The chapters on free association and transference are outstanding. The chapter on dreams is also well done, but the emphasis on the manifest content of the dream tends to give the impression that unconscious meaning has little significance. The author's vast clinical experience is evident in the ease with which he teases out the basic behaviour patterns, how they are evident in the transference and how they originated in the past. Throughout the book the author's "social consciousness" is evident and his emphasis on the analyst's integrity, social responsibility and medical responsibility, is well taken.

The clarity of the writing makes the book worthwhile reading, not only for analysts and psychiatrists, but also for other interested medical practitioners. H. L. M.

THE BIRTH OF NORMAL BABIES, by Lyon P. Strean, M.Sc., Ph.D.; Consultant, Norristown State Hospital, Norristown, Pa.; Consultant, Montgomery Hospital, Norristown, Pa. Twayne Publishers, New York, 1958. Price $3.95.

Congenital abnormalities pose a challenging problem to the medical profession and in this book. Dr. Strean attempts to give his reasons for the occurrence of such abnormalities. It is his feeling that stress is the causative factor in the development of congenital defects.

He divides stress into three categories which include traumatic (injury), physiologic (infectious or metabolic disease), and emotional. It is his feeling that stress in the first trimester of pregnancy influences the adrenal cortex to produce an abundance of cortisone. This catabolic substance (cortisone) is in Dr. Strean's opinion the etiologic agent in most congenital abnormalities. He has experimentally produced cleft palate in a high percentage of mice by stressing the pregnant mouse in early pregnancy. The author then goes on to give a long series of case histories that present traumatic, physiologic, or emotional stress in the first trimester of pregnancy with the resulting birth of a defective infant.

This book over-simplifies the problem of what causes congenital abnormalities. He does point out that different individuals react differently to like stressful situations and that this accounts for healthy babies being born to mothers who had "stressful" first trimesters of pregnancy. The stresses presented in his case histories range from doing a "belly-flop" while diving to allergic reactions from drugs.

This book is not recommended reading for expectant mothers. G. A. S.

BOOKS RECEIVED

A History of Neurology, by Walther Riese, M.D.; Associate Professor of Psychiatry and Neurology; Associate Professor of the History of Medicine, Chairman of the Department of the History of Medicine, Medical College of Virginia, Richmond, Virginia. Foreword by Felix Marti-Ibanez, M.D.; Professor and Director of the Department of the History of Medicine, New York Medical College, Flower & Fifth Avenue Hospitals, New York, New York; Editor-in-Chief of *M.D. Medical News*. M.D. Publications, Inc., New York, 1959. Price $4.00.

Therapeutic Radiology, by William T. Moss, M.D., Assistant Professor of Radiology, Northwestern University School of Medicine, Department of Radiology, Chicago, Illinois; Director, Department of Therapeutic Radiology, Chicago Wesley Memorial Hospital; Chief, Department of Therapeutic Radiology, Veterans Administration Research Hospital, Chicago, Illinois. Foreword by Lauren V. Ackerman, M.D. The C. V. Mosby Company, 1959, St. Louis. Price $12.50.

The Family Medical Encyclopedia, by Justus J. Schifferes, Ph.D. Illustrated by Louise Bush, Ph.D. Little-Brown and Company, Toronto, 1959. Price $4.95.

A History of Ophthalmology, by George E. Arrington, Jr., M.D., Associate in Ophthalmology, Medical College of Virginia; Attending Ophthalmologist, Medical College of Virginia Hospital; Richmond Eye Hospital, Retreat for the Sick Hospital, and the Richmond Memorial Hospital of Richmond, Richmond, Virginia. Foreword by Felix Marti-Ibanez, M.D., Professor and Director of the Department of the History of Medicine, New York Medical College, Flower & Fifth Avenue Hospitals. M.D. Publications, Inc., New York, 1959. Price $4.00.

The Power of Sexual Surrender, by Marie N. Robinson, M.D. Doubleday & Company, Inc., New York, 1959. Price $4.50.

Clinical Auscultation of the Heart, by Samuel A. Levine, M.D., Clinical Professor of Medicine, Emeritus, Harvard Medical School; Consultant in Cardiology, Peter Bent Brigham Hospital, Boston; Consultant Cardiologist, Newton-Wellesley Hospital; Physician, New England Baptist Hospital; and W. Proctor Harvey, M.D., Associate Professor of Medicine, Georgetown University School of Medicine, and Director, Division of Cardiology, Georgetown University Hospital; Consultant in Cardiology, Walter Reed Army Medical Center, Bethesda Naval Hospital. Second Edition. W. B. Saunders Company, Philadelphia, 1959. Price $11.00.

Synopsis of Treatment of Anorectal Diseases, by Stuart T. Ross, M.D., Diplomate of the American Board of Proctology; Secretary of the American Board of Proctology; Fellow and Past President of the American Proctologic Society; Fellow of the New York Proctologic Society; Fellow of the Pennsylvania Proctologic Society; Honorary Fellow of the New Jersey Proctologic Society; Corresponding Member of Sociedad Brasileira de Proctologia. The C. V. Mosby Company, St. Louis, 1959. Price $6.50.

Textbook of Pediatrics, Seventh Edition, edited by Waldo E. Nelson, M.D., Professor of Pediatrics, Temple University School of Medicine; Medical Director of Saint Christopher's Hospital for Children. With the collaboration of eighty-one contributors. W. B. Saunders Company, Philadelphia, 1959. Price $16.50.

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Curiosa et Trivia

WILLIAM B. McCUNNIFF

In an ordinary season, a major league hockey team expects a half dozen *major* injuries. The hundreds of minor cuts and bruises barely rate mention.

Rehearsal for Pearl Harbor: At the beginning of the Civil War, the U. S. Army Medical Department consisted of 115 medics, including the Surgeon General. Twenty-four of these transferred their services to the Confederacy—leaving the Union with a grand total of ninety-one medical officers.

However, by 1865, the Union had twelve thousand medics in uniform.

Every forty-five minutes, one American dies of tuberculosis.

Capsule Clinics

- Lowering of body temperature by repeated cooling provides temporary relief of symptoms associated with multiple sclerosis. However, improvement lasts only as long as the body temperature remains lowered. Watson, C. W., New England J. M. **261**:1253, 1959.

- In hypertension it is always preferable to use only one drug for a patient if one drug will reduce the blood pressure to normal or near normal. Currens, J. H., New England J. M. **261**:1062, 1959.

- Pinworm infestation in humans is often attributed to contact with a household pet. Such misinformation is often unwittingly given to parents by physicians. Goldberg, H. C., et al., J. M. Soc. New Jersey **56**:671, 1959.

- When a sensitive inhibition-bloc technic is used the latex-fixation test of Singer and Plotz is not specific for rheumatoid arthritis. Dresner, E., and Trombly, P., New England J. M. **261**:981, 1959.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

The fray over the Forand bill appears to be over although Rep. Forand says it is technically possible for the committee to consider other variations on his bill as amendments to social security legislation but it is not probable.

The House Ways and Means Committee on April 1 voted down the Forand bill by a vote of 17 to 8, which reduces the chances of any government paid health insurance for the aged being passed in this election year.

The committee's 10 Republican members were reported to have joined seven Southern and border state Democrats in refusing to write the plan into a bill making the changes in the Social Security Act.

Rep. Forand is contemplating trying to force a House vote on his proposal by filing a petition to take the matter out of the committee's hands. He would need the signatures of a majority of the House to do this.

On a proposition to limit the benefits to hospitalization as a compromise, the committee voted 16 to 9 against it.

The Associated Press estimated that there are 4,000,000 persons who are over 65 but are not on the Social Security roles and these people would not be covered by Forand type legislation.

While the Eisenhower administration was against the Forand bill, HEW Secretary Flemming refused to term the bill "socialized medicine" and expressed the opinion that physicians should come under Social Security.

Another bill being considered would be on a voluntary participation, but limited to persons more than 65 years of age, with the premiums graduated to the income of the participant—again by-passing the older person who is medically indigent. This bill would not be tied in with Social Security. Senator Jacob Javits (R., N. Y.), Senator John S. Cooper (R., Ky.) and Senator Hugh Scott (R., Pa.) are the ones interested in the promotion of this bill. The voluntary insurance they propose would provide medical, hospital and nursing home care.

The AFL-CIO Committee on Political Education (COPE) in its fight for the Forand bill published a political memorandum entitled "The Forand Bill and the Record of the A.M.A." While Dr. Louis M. Orr, President of the A.M.A. was in St. Louis as speaker at the annual banquet of the Missouri State Medical Association annual session, he released a letter demanding a retraction from George Meany, president of AFL-CIO, and giving a factual explanation of the A.M.A.'s position on the health measures mentioned in the COPE memo.

The COPE statement did not cite references, but it is taken almost word for word from a campaign speech delivered on October 27, 1950, by former Congressman, Eugene D. O'Sullivan, from Nebraska. After losing his campaign for reelection, Congressman O'Sullivan had the speech printed in the *Congressional Record* of December 8, 1950.

A special edition of the A.M.A. Medical Legislative Digest terms the AFL-CIO memorandum as "containing falsehoods and distortions." Illustrative is the allegation that "A generation ago, the A.M.A. opposed the requirement that all cases of tuberculosis be reported to a public authority—the foundation for all tuberculosis control methods." Some of the allegations were true, but without background information gave a totally wrong impression.

Another development on the Forand bill was that Rep. Forand took parliamentary steps toward placement of a discharge petition which, if 219 House members sign, could bring HR 4700 to a floor vote notwithstanding opposition of the Ways and Means Committee. The Washington Report on the Medical Sciences points out that the "Drastic character of this step is illustrated by the fact that in nearly a quarter century as House member Rep. Forand has never sponsored a committee-by-passing petition and rarely, if ever, has he signed one."

Public Health Service

The House Appropriations Committee has approved an appropriation of $876,929,200 to operate the U. S. Public Health Service for the fiscal year beginning July 1. This amount is $39 million more than the current year's funds and is $113.3 million more than the White House recommended. More than half of the money is for the National Institutes of Health and would be used entirely for research, mainly in the form of grants. The National Cancer Institute is designated to receive $102,469,000. Other designations are mental health, $79,863,000; heart, $71,762,000; arthritis and metabolic disease, $52,841,000; general research, $52,660,000; neurology and blindness, $44,362,00; allergy and infectious diseases, $38,439,000, and dental, $12,604,000.

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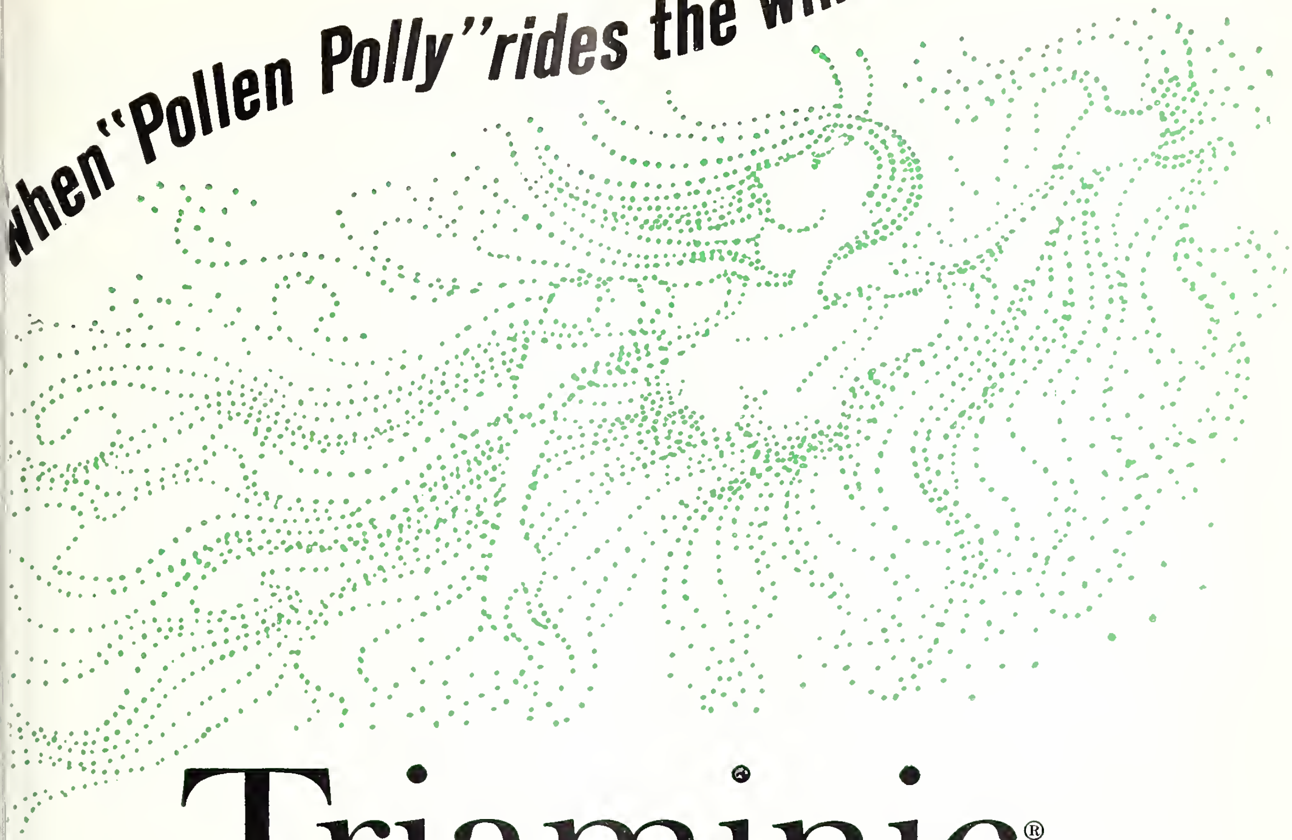

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References: 1. Fabricant, N. D.: E. E. N. T. Monthly 37:460 (July) 1958. 2. Lhotka, F. M.: Illinois M. J. 112:259 (Dec.) 1957. 3. Farmer, D. F.: Clin. Med. 5:1183 (Sept.) 1958. 4. Fuchs, M.; Bodi, T.; Mallen, S. R.; Hernando, L., and Moyer, J. H.: Antibiotic Med. & Clin. Ther. 7:37 (Jan.) 1960. 5. Halpern, S. R., and Rabinowitz, H.: Ann. Allergy 18:36 (Jan.) 1960.

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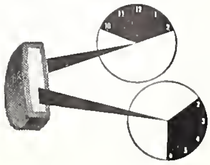

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Across Missouri

The right of free speech and to drive an automobile has proved not to be one and the same thing as is almost universally accepted today. Last year in Missouri some 28,000 persons lost the privilege of driving a motor vehicle. Among various reasons for the loss of license to drive are inability to prove financial responsibility in case of an accident, and the recording of four moving violations within a two year period. Early in the year volunteers began seeking signatures on initiative petitions for a law requiring alcohol blood tests for suspected drunken drivers. The fact that approximately 1,000 persons were killed in traffic accidents in Missouri during 1959 gave impetus to the volunteer work. The plan is to submit a proposed law to the vote of the people in the November elections if sufficient signatures are obtained.

MISSOURI EXPANDING ITS FORESTS

The Missouri Conservation Commission estimated that it would furnish approximately 10 million trees and shrubs seedlings this spring. The plants are used principally by farmers for reforestation and also to provide cover and food for Missouri's wildlife.

This project was begun in 1939 and has changed the attitude that Missouri's timber stand was a limited resource which would one day be used up to its consideration as a major state crop.

When this year's orders have been filled, the Commission will have distributed a total of 123 million seedlings since the beginning of its work.

When Missouri was settled, two of every three of the state's 44 million acres were in forest. Especially in the early years of the century, this stand was reduced by millions of acres. With the extensive reforestation, about one in every three acres is again in timber and latest surveys show that Missouri has a large resource in timber.

FOREIGN TRADE IN INLAND PORTS

It would be logical to think that in the Midwest there would be extremely little foreign trade, it being limited to the seaboard areas. Recently the Chamber of Commerce in Kansas City completed a survey of exports and imports in 1958. In that year Kansas City firms spent $101,751,007 abroad and sold $124,642,849 worth of grain and goods to foreign countries.

A large percentage of the business involved farm and food products. It was estimated that the Greater Kansas City area sent approximately 90 million dollars in farm products, chiefly wheat, to the markets of the world. Approximately 75 per cent of the imports were also in agricultural products, coffee beans and tea leaves being a large item.

RESULTS IN MENTAL HEALTH CARE

In a report on the six months ending with the last of the year, there were 1,138 patients released from the five state mental hospitals, according to Dr. Addison M. Duval, state director of the Mental Health Division. Dr. Duval says that if this rate continues until the end of the fiscal year, June 30, 1960, a rise of 26.9 per cent in the number of discharges will be realized. The rise in the number of incoming patients appears to represent a rise of about 13 per cent.

CARE OF THE HANDICAPPED

In 1959, the Missouri Society for Crippled Children and Adults and its 115 county affiliates gave care and treatment to 4,861 physically handicapped children and adults, according to Dr. Richard H. Kiene, Kansas City, president of the society. This represented an increase of 56 per cent over the preceding year. During the year a state-wide speech and hearing program was developed. Nine scholarships in the fields of speech therapy, physical therapy and special education were awarded by the society in 1959.

MUSEUM AT STATE CAPITOL

That the Museum in the State Capitol in Jefferson City holds its own with the many museums in the state is indicated by the approximate 75,540 persons who registered as visitors at the museum in the State Capitol Building last year. And the number registering probably is far short of the number who spent limited time in the museum but did not register.

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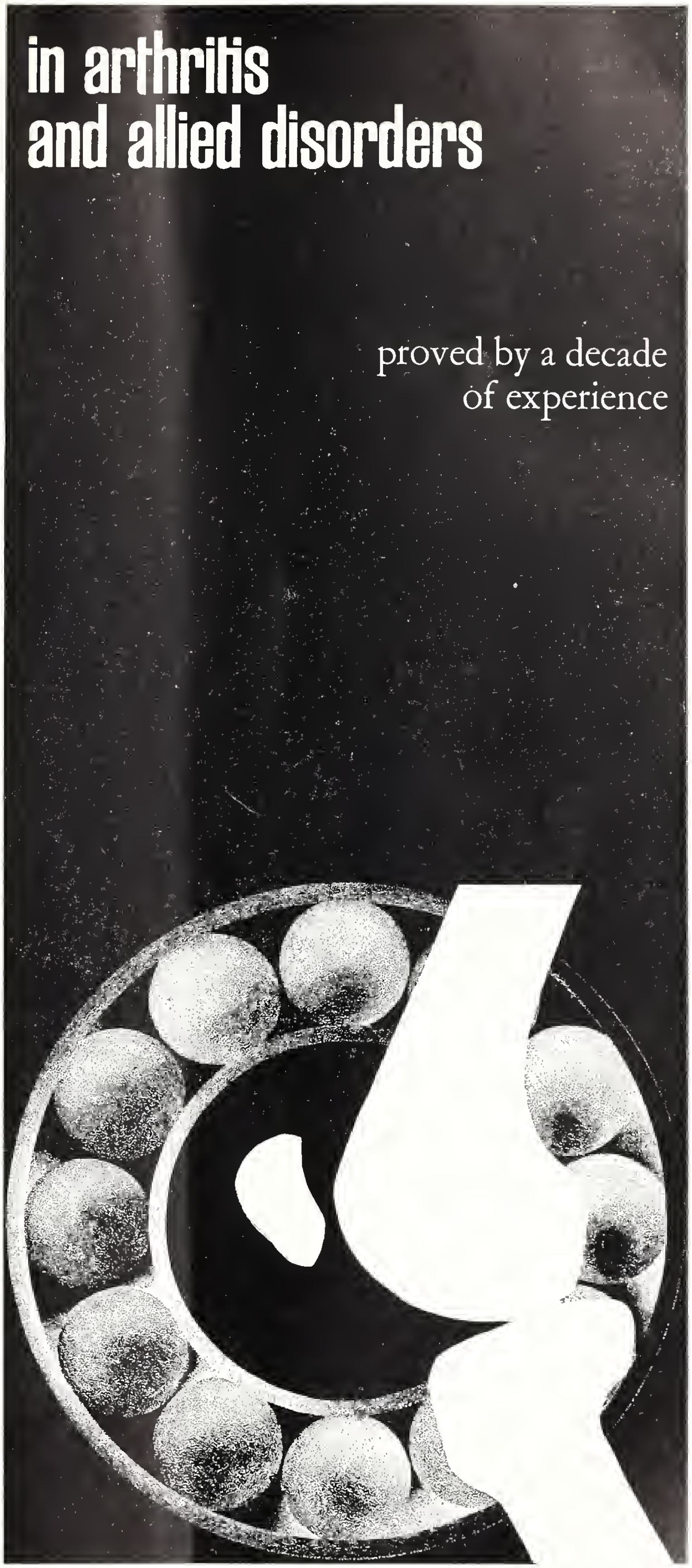

]

JOHN F. PEARL, M.D.

Missouri Academy of General Practice

UNIVERSITY OF MISSOURI TO HOLD CLINICAL CONFERENCE

The fifth annual Spring Clinical Conference will be held May 11 and 12 at the University of Missouri Medical Center Auditorium. The conference is sponsored by the University of Missouri School of Medicine, the Missouri Heart Association, the Missouri Academy of General Practice and the Missouri State Diabetes Association. The program follows:

Wednesday, May 11, 1960

KENNETH K. KEOWN, M.D., Columbia, Presiding

8:00 a.m. Registration.

9:00 a.m. Welcome by Vernon E. Wilson, M.D., Dean and Director, University of Missouri School of Medicine.

9:10 a.m. Heart Disease in Children, Harry G. Stoeckle, M.D., Columbia, Associate Professor of Pediatrics, University of Missouri School of Medicine.

9:40 a.m. Coffee break, Graduate Lounge.

10:00 a.m. Present Status of Human Viral Diseases, Leonard M. Schuman, M.D., Minneapolis, Minn., Professor of Epidemiology, University of Minnesota School of Public Health.

11:00 a.m. Mitral Valvular Disease: Anatomic and Physiologic Considerations, Carlton B. Chapman, M.D., Dallas, Texas, Professor of Medicine, University of Texas Southwestern Medical School.

12:00 noon Office Ophthalmology, John A. Buesseler, M.D., Columbia, Associate Professor of Surgery, Chief of Ophthalmology, University of Missouri School of Medicine.

12:30 p.m. Luncheon, Doyle C. McCraw, M.D., Bolivar, Presiding.

2:00 p.m. Thromboembolism, Frederick A. Coller, M.D., Ann Arbor, Mich., Professor of Surgery, Emeritus, University of Michigan School of Medicine.

3:00 p.m. to 4:30 p.m. Panel: Poliomyelitis; Live Virus; Salk Vaccine.
Moderator: Owen A. Kearns, M.D., Professor of Preventive Medicine and Public Health, University of Missouri School of Medicine.
Panelists:
Leonard M. Schuman, M.D.
Edgar H. Belden, M.D., Jefferson City.
Clement E. Brooke, M.D., Columbia.

Thursday, May 12, 1960

H. O. LOYD, M.D., Jefferson City, Presiding

9:00 a.m. The Detection of Early Diabetes, Alexander Marble, M.D., Boston, Mass., Clinical Professor of Medicine, Harvard Medical School; Joslin Clinic.

10:00 a.m. Coffee break, Graduate Lounge.

10:20 a.m. Panel: Complication of Diabetes.
Moderator: Robert L. Jackson, M.D., Columbia.
Panelists:
Alexander Marble, M.D., Boston, Mass.
Carlton B. Chapman, M.D., Dallas, Tex.
Willis E. Brown, M.D., Little Rock, Ark.
John A. Buesseler, M.D., Columbia.

12:00 noon Office Urology, Ian M. Thompson, M.D., Columbia, Associate Professor of Surgery, Chief of Urology, University of Missouri School of Medicine.

12:30 p.m. Luncheon.

2:00 p.m. Carcinoma of the Female Pelvis, Willis E. Brown, M.D., Little Rock, Ark., Professor of Obstetrics and Gynecology, University of Arkansas School of Medicine.

3:00 p.m. to 4:30 p.m. Panel: Recurrent Carcinoma of the Breast: Diagnosis and Treatment.
Moderator: John J. Modlin, M.D., Columbia.
Panelists:
Frederick A. Coller, M.D., Ann Arbor, Mich.
Theodore E. Keats, M.D., Columbia.
Thomas W. Burns, M.D., Columbia.

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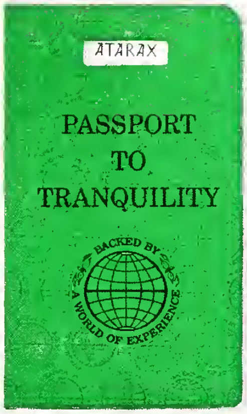

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IN ELDERLY PATIENTS well tolerated by debilitated patients	"... seems to be the agent of choice in patients suffering from removal disorientation, confusion, conversion hysteria and other psychoneurotic conditions occurring in old age." Smigel, J. O., et al.: J. Am. Geriatrics Soc. 7:61 (Jan.) 1959.	Settel, E.: Am. Pract. & Digest Treat. **8**:1584 (Oct.) 1957. Negri, F.: Minerva med. **48**:607 (Feb. 21) 1957. Shalowitz, M.: Geriatrics **11**:312 (July) 1956.
IN ALLERGIC PATIENTS useful adjunctive therapy for asthma and dermatosis; particularly effective in urticaria	"All [asthmatic] patients reported greater calmness and were able to rest and sleep better... and led a more normal life.... In chronic and acute urticaria, however, hydroxyzine was effective as the sole medicament." Santos, I. M., and Unger, L.: Presented at 14th Annual Congress, American College of Allergists, Atlantic City, New Jersey, April 23-25, 1958.	Eisenberg, B. C.: J.A.M.A. **169**:14 (Jan. 3) 1959. Coirault, R., et al.: Presse méd. **64**:2239 (Dec. 26) 1956. Robinson, H. M., Jr., et al.: South. M. J. **50**:1282 (Oct.) 1957.
IN HYPEREMOTIVE ADULTS does not impair mental acuity	"... especially well-suited for ambulatory neurotics who must work, drive a car, or operate machinery." Ayd, F. J., Jr.: New York J. Med. **57**:1742 (May 15) 1957.	Garber, R. C., Jr.: J. Florida M. A. **45**:549 (Nov.) 1958. Menger, H. C.: New York J. Med. **58**:1684 (May 15) 1958. Farah, L.: Internat. Rec. Med. **169**:379 (June) 1956.

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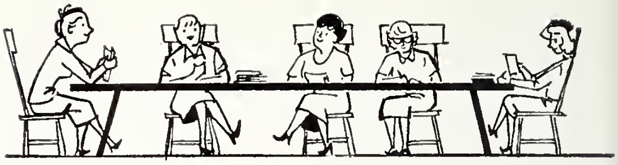

St. Louis City and St. Louis County Auxiliaries put forth every effort to make the State Convention, held in St. Louis in March, beautiful and festive, happy and comfortable for all, and we traveled back to our homes feeling a rosy glow of remembrance. Our hostesses par excellence were the Mesdames Mayer and Bowersox, Feller and Schattyn and all the mesdames in both Auxiliaries. Our gratitude and praise go out to them for their originality, their time and labor, and for the general spirit that pervaded of wishing to make everything perfect for those three many-splendoured days.

Mrs. Jordan Kelling

Working around the clock, without seeming to expend energy, was our President, Marjorie Peterson, presiding, entertaining, carefully conducting each detail, smiling and putting all present at their ease.

Three "Janes" were elected to office for next year: Jane (Mrs. Frederick E.) Wade, President-elect; Jane (Mrs. Robert H.) Stewart, First Vice-president; and Jane (Mrs. Lawrence S.) Crispell, Treasurer.

Alline (Mrs. Maurice) Chastain, Lillian (Mrs. Harold H.) Feller, and Frances (Mrs. William R.) Rost were elected Second, Third and Fourth Vice-presidents.

Venus (Mrs. J. Martyn) Schattyn was made Auditor, while my very good neighbor across the wide Missouri, LaVina (Mrs. E. W. II) Allen was elected to be our new Recording Secretary. Betty (Mrs. W. E., Jr.) Koppenbrink of my own Lafayette-Ray Auxiliary is our new Corresponding Secretary, and Esther (Mrs. Henry S.) Bauman will serve us as Parliamentarian. Mrs. W. E. Martin, Past President, installed us all as Cadet Air Corps Officers who were to man our great ship, the State Auxiliary, and so inspired us that we were ready to get the props warmed-up for immediate take-off.

Wasn't it a lovely convention? Wasn't the Sunday Night Buffet wonderful, and the Cruise Party which preceded it, where we were the guests of St. Louis City and St. Louis County? The dinner was delicious, the decorations out of this world, and the show which followed—well, what can we say to the St. Louis County doctors who gave of their precious time to make us groan and weep with laughter at their ballet, can-can, and apache dancing to let them know how much we appreciated it and how much fun we had? There were beautiful voices, too, singing beautiful songs; and, "Nettie" Shepherd and "Hettie" Deyton, actresses-producers without peer, we have only one regret. We did not send you and your wonderful cast a whole carload of roses.

It was a star-studded convention with the presence of three important visitors. Mrs. Frank Gastineau, our National President, was with us for two days, and addressed our Monday luncheon, giving (according to one of the doctors present) "the best talk he had ever heard on the Forand legislation." That was the "Paris in the Spring" luncheon, and it was beautiful.

Mrs. John M. Chenault, President of the Woman's Auxiliary to the Southern Medical Association, was with us for all our meetings, and was one of our Tuesday luncheon speakers. That was the "Haute Coutoure" luncheon given at the beautiful Algonquin Golf Club, and we shall never forget the precious, miniature hats that poked so gaily out of bright hatboxes decorating the tables. The "Capsule Fashion Wardrobe" program was one of the many highlights of the day.

At that luncheon some well-deserved honors were paid. St. Louis County won the cup for being the Outstanding Auxiliary of the year along with a money corsage. Money corsages went to Johnson, Grand River, Cole and Buchanan Counties for being outstanding in their size-class, and Honor Certificates went to ten counties. It looks as if the State of Missouri has been very busy during this past year. Keep up the good work!

Dr. Louis M. Orr, President of the American Medical Association, was the speaker at the Banquet on Tuesday night. He outlined our course of action clearly in the field of Legislation: we must write, and urge all within our spheres of influence to write to Congress to oppose such bills as the Forand Bill.

We adopted some new enterprises at our business sessions. A new committee, headed by Mrs. Joseph L. Fisher, has been formed to study means of efficient and continuous programming

(Continued on page 638)

Volume 57, Number 5—May, 1960

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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GEORGE C. LEWIS, JR., M.D., *Philadelphia*

Radiation Therapy for Cervical Cancer

Radiation as the most effective means for the treatment of the majority of patients with invasive stages of cervical cancer is discussed. Methods, dosages and need for well trained personnel are discussed.

Dr. Lewis is Assistant Professor of Obstetrics and Gynecology at the University of Pennsylvania.

The paper was read before a meeting of the Missouri Division of the American Cancer Society on October 10, 1959.

RADIATION APPLIED by physicians skilled in its proper use is still the most effective means for the treatment of the majority of the patients afflicted with the invasive stages of cervical cancer. Success with this form of therapy depends upon several factors. The disease must be limited to the true pelvis. The lesion must be responsive to irradiation. Radium applicators, x-ray units or cobalt beam sources, must be used in such a way as to gain the optimum benefits that each type of equipment has to offer. The physicians employing radiation sources must be well trained in the nature of the disease, the host's anatomic and physiologic characteristics, and the characteristics of the agent they are employing.

More than 55 years experience with irradiation has amply demonstrated that it can destroy cancer of the cervix limited to the pelvis and can permit the patient to pursue a normal, active and useful life. In contrast to other malignancies, cancer of the cervix tends to remain within the pelvis. It is usually moderately sensitive to irradiation. Small amounts of therapy to limited zones will rarely afford control. Excessive amounts may destroy the malignancy but injuries to the patient's vital pelvic structures may be as serious as the tumor. With generally accepted levels of therapy between these two extremes only an approximate 10 per cent of the cases should prove to have resistant malignancy. Less than 10 per cent should experience severe injuries.

The classification of patients prior to therapy into groups that will or will not respond has been reported on the basis of the Papanicolaou smear. This work has not been generally confirmed. It must be noted that this work provides a percentage figure for a particular smear examination. It does not give an absolute prognosis for the individual patient. During therapy, the Papanicolaou smear, tumor biopsy and pelvic examination will provide a better index of response than the pretherapy evaluation by the smear alone. Unfortunately such an evaluation requires the patient to receive almost the complete course of therapy before the individual response is determined. All too frequently the patient with a radio-resistant tumor has other clinical findings which mitigate against surgical therapy, such as widespread malignancy, age, obesity or other general medical problems.

Tremendous progress has been made in the development of equipment and technics which will best exploit the potentialities of irradiation. Physicists and radiotherapists have contributed greatly to knowledge of the effective use of irradiation. They have added to knowledge of the pattern of distribution of radiation dose. The concept of therapy has changed from vague generalities of milligram hours and roentgens in air to rads of tissue dosage. Milligram hours cannot by itself connote the amount of energy delivered to a volume of tissue. The radiologist who expresses dosage in roentgens measured on the surface alone stops considering his treatment at the skin of the patient although the beam he utilizes penetrates far beneath this visual barrier. There is now no reason for ignorance of the dosage actually delivered to the pelvic tissues. It is possible to deliver the amount of therapy needed to eliminate the malignant cells with good control.

The suggested amount of exposure dosage in the pelvis should be 6,000 to 8,000 rads given in five to six weeks. This amount of therapy will prove equally effective for both squamous malignancy and adenocarcinoma. There should be no major alteration from these dosage levels because an early growth pattern is exophytic or endophytic. In some of the endophytic lesions accompanied by severe infection it is imperative to use external beam therapy first, and to employ it cautiously after adequate antibiotic preparation.

Although normal tissue tolerance of radiation cannot be specified exactly for each individual patient, great care should be taken to avoid treatment in excess of certain limits. On the basis of research now in progress at the Hospital of the University of Pennsylvania these limits, or maximum tolerance values, appear to be 8,000 r for the bowel and 10,000 r for the bladder and ureters in five to six weeks. Every effort should be made to keep the amount of therapy received by these vital organs well below the limits specified.

Therapy methods must be varied according to stage of the disease, and to a limited extent according to the clinically apparent distribution of the disease. The earliest stage of cervical malignancy, Stage O or non-invasive cancer, should be treated by surgery. On rare occasions a patient medically unfit for surgery can be treated by a radium application within the cervix and upper vagina. A Stage I case with the disease apparently limited to the cervix should receive radiation therapy throughout the entire pelvis. Stage II malignancy, which extends into the parametrium, may be treated in a manner similar to Stage I. If the lesion extends into the vagina, particularly the middle third, the external beam arrangement or placement of radium may need to be altered to include all of the vagina in the irradiated zones. Advanced Stage II and Stages III and IV will require larger amounts of irradiation over wider zones of the pelvis. Special radium molds or radium needles may be needed to include vaginal extension of the tumor. Each of these cases will require careful consideration of the pattern of radiation dose distribution in order to arrange it to suit the spread of disease.

The results in Stages III and IV continue to be discouraging despite improved therapy. Fortunately these advanced cases are disappearing from therapy centers. In the Philadelphia area Stages III and IV are now rarely encountered. Prior to 1950, 80 per cent of the patients were staged in these groups. Now 80 per cent are Stage I to II. This change has resulted from three factors: (1) The American Cancer Society has educated the public to seek periodic health examinations. (2) The Philadelphia Committee for the Study of Pelvic Cancer has brought the need for periodic examinations to the attention of Philadelphia physicians. The Committee has also urged hospitals to eliminate delays in diagnosis within clinics, wards and private services through the frequent use of pelvic examinations on admission. (3) The use of the Papanicolaou smear has found widespread acceptance by both general practitioner and specialist. In the next few years the percentage of Stage O, non-invasive malignancy, should rise from its present rate of 10 per cent of cases to 80 or more per cent.

Invasive cervical cancer is best treated by a combination of x-ray or cobalt beam and radium or cobalt sources. External beam therapy is best suited for treatment of the lateral parametrium and node bearing zones. The physical characteristics of radium limit its usefulness to the cervix, uterus, upper vagina and areas of the parametrium adjacent to the cervix. The skillful combination of these modalities will result in a reasonably uniform irradiation of all structures within the pelvis that might contain malignancy. "Cure" should be the objective of therapy in Stages I and II. The majority of Stage III and a few of Stage IV patients should be considered for "curative" therapy. The remaining patients should receive only enough treatment to offer palliation.

It cannot be emphasized enough that if "cure" is to be expected all potential tumor bearing areas of the pelvis must be adequately treated.

Limited therapy is too frequently a source of failure. X-ray cone therapy directed only at a cervical lesion in Stage I (fig. 1) will miss all the tissue zones about the cervix which may be the source of future tumor growth. External cross fire beam therapy aimed at the cervix (fig. 2) will also neglect important pelvic tissues. Even though a lesion appears to be in the cervix alone, it is important to direct therapy so that all areas within the pelvis are included.

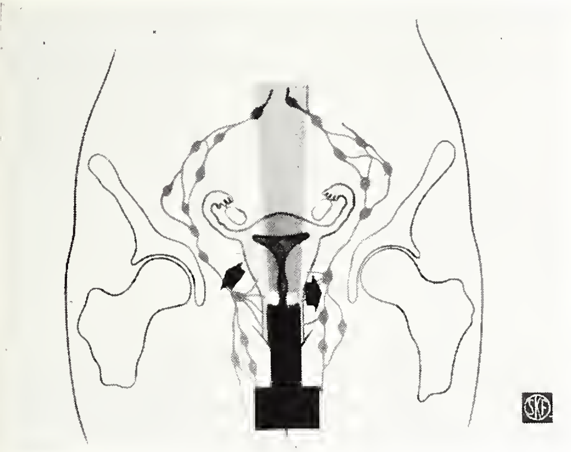

Fig. 1. Transvaginal X-ray Cone Therapy. A single beam aimed at the cervix misses zones of tumor spread.

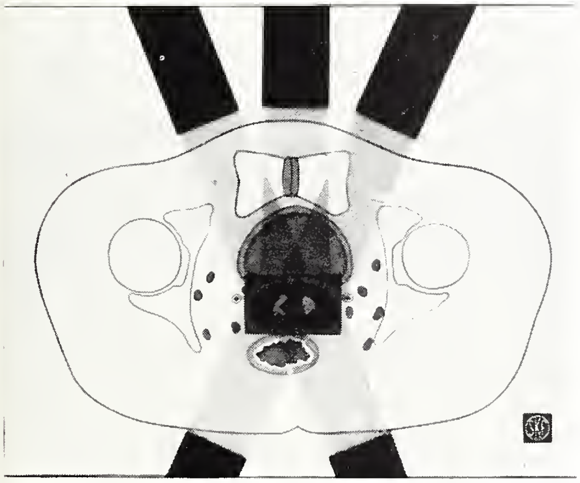

Fig. 2. Narrow external crossfire beams of x-ray aimed at the cervix miss potential areas of tumor spread in the pelvis.

The effective range of radium therapy when it is employed alone is limited to the zone termed "paracervical triangle" as shown in the shaded portion of figure 3. For practical purposes only an ineffectively small dose of radiation will reach the lateral pelvic walls. Increased exposure in an attempt to attain therapeutic dose levels in the lateral tissues will result in an excessive number of severe reactions in the structures adjacent to the cervix.

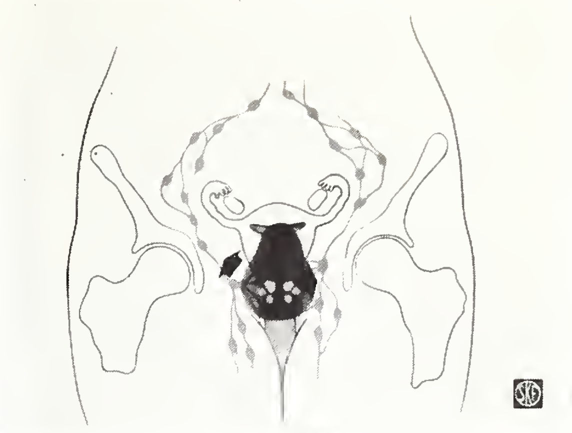

Fig. 3. Radium Therapy for Cervical Cancer. The heavily shaded area depicts the effective range of intracavitary applicators.

At the Hospital of the University of Pennsylvania the preferred method of therapy for 89 per cent of the patients has been irradiation (table 1). A few patients had malignancy too advanced for any form of therapy and another small group of cases was considered more suitable for surgical therapy.

TABLE 1

DISTRIBUTION OF PATIENTS WITH CERVICAL CANCER ACCORDING TO TREATMENT

Hospital of the University of Pennsylvania
1948-1953

	Number	*Per Cent*
Cases evaluated	250	100
Not treated	6	2
Treated by radiation	222	89
Treated by radical surgery	22	9

The program of irradiation therapy at the University of Pennsylvania has progesssively changed over the last twenty years. The major improvements were brought about by a program for the control of the distribution and amount of radiation, which was instituted in 1951. The amount of externally administered treatment has risen from mid-pelvic tissue levels of 1,500 to

TABLE 2

DISTRIBUTION ACCORDING TO INTERNATIONAL STAGE OF PATIENTS TREATED BY RADIATION

Hospital of the University of Pennsylvania
1948-1953

	Number	*Per Cent*
Stage I	63	28
Stage II	115	52
Stage III	34	15
Stage IV	10	5

2,500 r in 1940 to 1950, to 2,000 to 4,500 r in 1951 to 1958, and finally to 4,500 to 6,000 r after January, 1958, when therapy with a 2 m.e.v. Van de Graaf unit was instituted.

Pre-therapy evaluation consists of the usual medical studies with endoscopic and radiographic examinations of the bowel, bladder and upper urinary tract. All cervical malignancies are staged according to the International Classification (tables 2 and 3). X-ray treatment using external beam therapy is employed first. This treatment is directed primarily at the parametrium and lateral pelvic walls. Prior to 1958 200 to 250 K.V.P. equipment was employed. Nearly all patients received x-ray first because it is felt that this permits shrinkage of bulky tumors, increased pliability of tissues fixed by tumor and reduction of infection. Weekly examinations during treatment make possible early detection of untoward tissue reactions and evaluation of tumor response.

TABLE 3

INTERNATIONAL STAGE OF PATIENTS TREATED BY CLARKE-WERTHEIM OPERATION WITH PELVIC NODE REMOVAL

Hospital of the University of Pennsylvania
1948-1953

	Number	*Per Cent*
Stage I	22	100
Stage II-IV	0	0

Intrauterine and intravaginal radium is employed as soon after the completion of x-ray as the patient's condition permits. A single application is used because of the complexity of the dosimetry and because of the fear that a small percentage of cases might not return for a second application. From 1940 to 1951 a Paris type colpostat and intrauterine tandem were inserted. After 1951 a rigid modification of the Manchester system, an Ernst applicator or special plastic molds were used. Orthographic dosimetry for control of the radium exposure was introduced under a research program in 1951.* Prior to the application of radium, radio-opaque catheters are inserted in the ureters. After the radium is inserted a series of seven radiographs are obtained. Radio-opaque media are placed in the bladder and rectosigmoid. The radiographs obtained are the following: (1) a lateral radiograph depicting radium and ureteral locations (fig. 4); (2) an A-P radiograph depicting bladder, ureter and radium locations (fig. 5); (3) an A-P radiograph for rectum and sigmoid-radium relationships (fig. 6); (4) a lateral radiograph for bladder, rectum, sigmoid and radium locations (fig. 7); (5 and 6) a lateral stereo pair to permit "visualization" of the relative positions of the structures and radium, and (7) a "squat shot" to show relationship of bladder and radium (fig. 8).

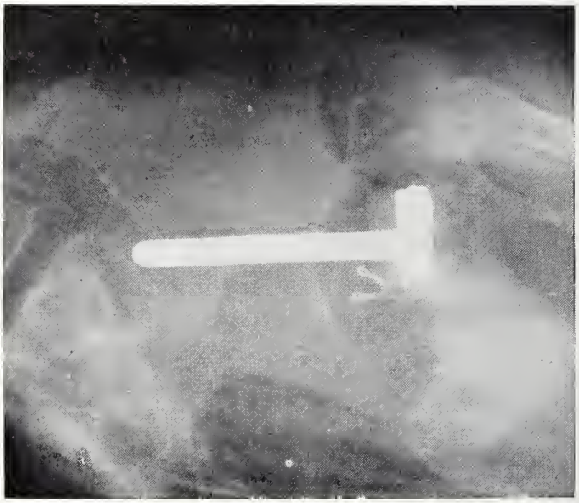

Fig. 4. Lateral Radiograph of Radium Placement. The pathways of the ureters are delineated by radio-opaque catheters. A metal clip is attached to the cervix.

The first four films are made on an orthographic table so that exact spatial relationships can be determined after correction of distortion by a pantograph. On the basis of measurements obtained, exposure dose rates may be calculated to the highest dose points on the vital contiguous

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* This project is supported in part by a research grant from the National Cancer Institute of the National Institutes of Health, United States Public Health Service, and in part by the American Cancer Society and the Gynecean Institute of Gynecological Research of the University of Pennsylvania.

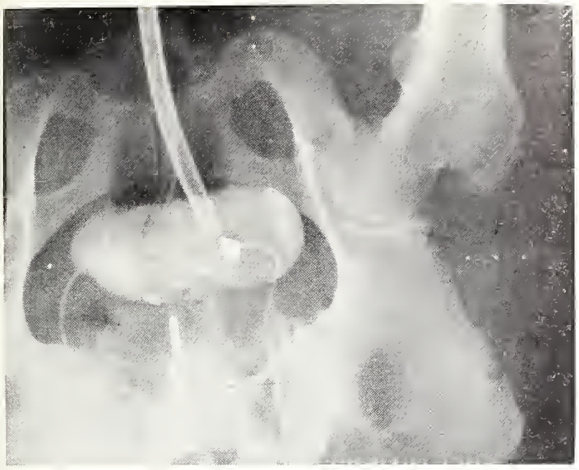

Fig. 5. A-P Radiograph of the Pelvis. Ten per cent Hypaque fills the bladder. Radio-opaque catheters demonstrate the courses of the ureters. A rectal tube is in place.

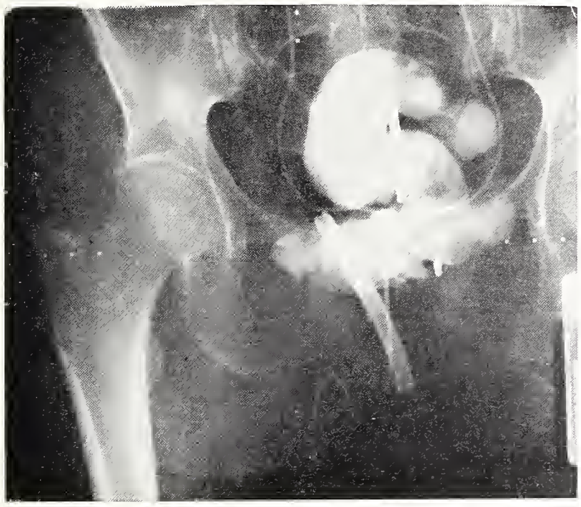

Fig. 6. A-P Radiograph of Pelvis. The rectum has been filled with barium sulfate diluted to one-third the usual amount for a barium enema study.

structures. In each individual case the final radium exposure dosage is correlated with that calculated for x-ray therapy. Adjustments are made so that the total therapy will not exceed 8,000 r to the bowel, and 10,000 r to the ureters and bladder. Point A of Tod and Meredith generally receives between 6,000 and 8,000 roentgens from both sources of irradiation. Radium provided 5,000 to 6,000 roentgens and x-ray the remainder at Point A when orthovoltage was employed. With supervoltage treatment this balance was reversed, i.e., the radium dosage was halved while x-ray dosage was doubled. Point B formerly received a total of 4,500 to 5,500 r from both sources. Now it receives between 5,500 and 6,500 r.

Five year results cannot yet be stated for a sufficient number of patients treated under the dosage control program. The five year survival free of disease for a group of patients from 1948 to 1953 inclusive is shown in table 4. The group represents a mixture of cases not adequately

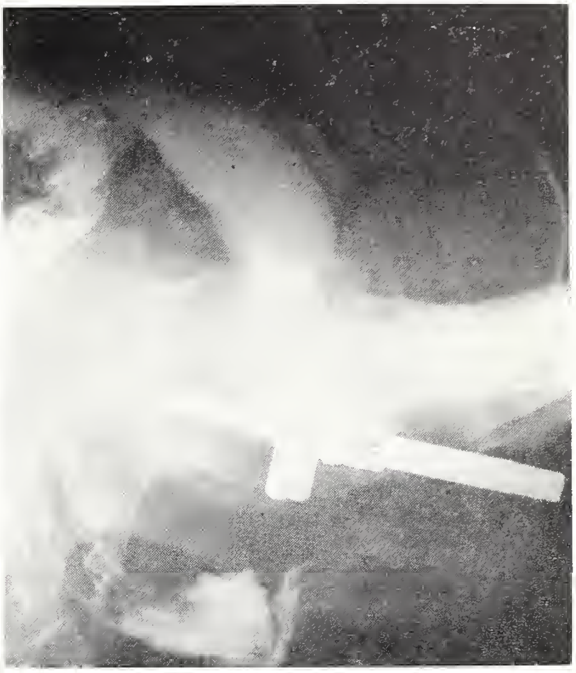

Fig. 7. Lateral Radiograph of Pelvis. The bladder contains 25 per cent Hypaque and the rectum is demonstrated by the diluted barium sulfate suspension.

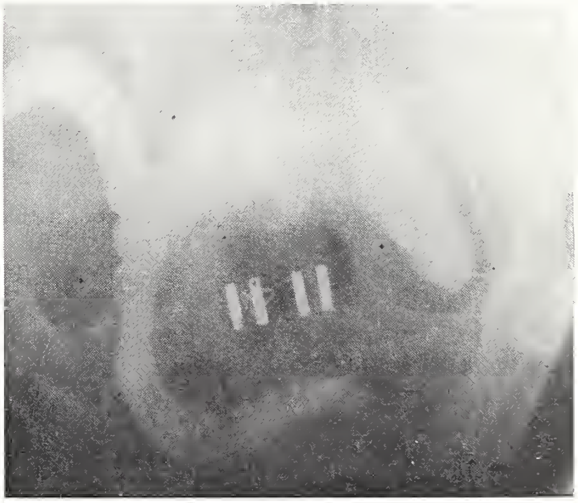

Fig. 8. Exposure obtained with the patient sitting above the film, the x-ray tube behind her shoulders. The bladder contains 25 per cent Hypaque.

TABLE 4

OUTCOME OF RADIATION THERAPY IN TERMS OF PER CENT SURVIVAL FREE OF MALIGNANT DISEASE FOR 5 YEARS

Results—Radiation Therapy
1948-1953

	Per Cent
Stage I	73
Stage II	55
Stage III	18
Stage IV	0

controlled as to tissue exposure dosage with those controlled in the early phases of the orthographic study. The low survival rates in Stages III and IV, though for a small number of patients, demonstrates the unsatisfactory results obtained in advanced cancer therapy. Certainly the Stage I and II patients showed more satisfactory survival rates. Complications in the noncontrolled patients were high, i.e., 18 per cent severe complications. The complication rate after 1951 dropped to 5 per cent for nondiabetic patients. In addition the sites of the severe complications shifted from the immediate pericervical tissues to more distant pelvic regions.

It is apparent from the experience gained at the Hospital of the University of Pennsylvania and from the reports of other investigators that irradiation therapy has been undergoing steady improvement and will continue to do so. There has been a marked increase in the complexity of therapy associated with this improvement. The demands upon the physician in terms of experience and knowledge have correspondingly increased. If the patient is to be offered the maximum benefits from irradiation it is incumbent upon the medical staff to establish a program that will meet certain minimum requirements. The minimum requirements may be summarized as follows:

1.The care of the patient must be highly individualized from pretherapy examination to the follow-up evaluation. No fixed program should be imposed upon all patients. No fixed dosage, or single applicator will prove satisfactory for all patients. Several types of patients should be considered more suitable for surgical management. These would include the following:

A. Patients with radiation resistant tumors.

B. Pregnant patients with early invasive cancer.

C. Diabetic patients whose medical condition permits surgery.

D. Patients with suspected extensive pelvic adhesions from inflammatory disease or previous pelvic surgery.

E. Patients with an adnexal mass of uncertain etiology, especially a suspected second primary malignancy.

F. Patients who express radiation phobia.

To this list should be added those patients seen in an institution with excellent surgical facilities, well trained surgeons and inadequate facilities or personnel for irradiation. Certainly surgery in early cases of cervical cancer can produce excellent results. The five year survival for patients treated by the Clarke-Wertheim operation with node dissection at the Hospital of the University of Pennsylvania is given in table 5 as an example of the results that may be anticipated in selected patients.

TABLE 5

OUTCOME OF RADICAL SURGERY IN TERMS OF PER CENT SURVIVAL FREE OF MALIGNANT DISEASE FOR 5 YEARS

Results—Surgical Therapy
1948-1953

	Per Cent
Stage I	77

2. Radiation must be administered by physicians trained in its use. There must be close cooperation between the gynecologists and surgeons who apply radium and the radiologists and physicists who administer x-ray or cobalt beam therapy. Today, no one individual can be acquainted with all of the aspects of surgery, radium application, x-ray, cobalt and radiation physics. It is essential to organize, within a hospital tumor committee, a team of individuals representing the specialties that deal with the irradiation and surgery of cervical cancer. A hospital staff containing a large number of physicians who would rarely encounter a case of cervical malignancy should arrange for the "team" to act either as consultants or as the actual therapists for every case coming to the institution. Where this is impossible due to lack of facilities or qualified personnel, the patients should be referred to an institution that can provide expert care and complete equipment.

3. The concept of controlled tissue dosage and controlled dose distribution should replace the

empirical approach to therapy. At present many institutions and individual radiologists are investing large sums of money in elaborate Cobalt^{60} and/or supervoltage equipment. These modalities will provide higher levels of tissue dosage than were attainable with orthovoltage equipment. It is conceivable that thereby the "cure" rates will be increased even in the more advanced cases. Unless great skill is exercised, and the concept of dosage control is employed, there is an even greater likelihood that complications will be encountered out of all proportion to the benefits obtained. Dosage control should include such basic measures as contour measurement, beam direction planning, portal film evaluation and summation isodose determination. Furthermore, control must be exercised on the basis of the patient's response and the medical complications, i.e., diabetes, intestinal tract disease, general debility, age. Allowance should be made for radium therapy already given or to be administered.

The application of radium should be accompanied by just as strict control as employed for x-ray therapy. The dose distribution, especially in the vital contiguous organs, should be determined as accurately as possible. While the program at the Hospital of the University of Pennsylvania is too complex for general application it is absolutely necessary that every insertion of radium for cervical cancer be checked by radiographs or by measurements using a probe dosimeter or scintillation counter. Radiographs of the radium placement with radio-opaque media in the bowel, bladder and ureters will permit not only an estimation of dosage to these structures but also a discovery of displaced radium holders that might cause serious injuries.

The future of radiation therapy remains promising. There are many agents under investigation that may enhance or supplement the effect of irradiation. Hormones, antibiotics, vitamins, oxygen and specific antitumor drugs are all being tested and one or more of them may prove able to increase the effectiveness of irradiation in controlling cancer. For the present, more attention to the basic principles of radiation therapy by everyone employing it will result in greater improvement in survival, with less chance of injury, than any new modalities of therapy now in sight for cervical cancer.

SUMMARY AND CONCLUSIONS

1. More than half a century of experience has indicated that irradiation can contral cancer of the cervix that is limited to the true pelvis.

2. Radiation may prove totally ineffective when it is improperly applied by individuals with little or no training in its use. Inadequate therapy can result in frequent tumor persistence or recurrence. The excessive administration of radiation may lead to severe injuries of the vital contiguous pelvic organs.

3. A combination of external beam therapy and radium provides the most suitable means for treating invasive cervical cancer. Six to eight thousand rads should be delivered to the entire pelvis in five to six weeks. Care should be taken to limit the irradiation of bowel, bladder and ureters.

4. The complexity of modern radiation therapy requires physicians to observe several minimum requirements. These include (1) individualized patient care, (2) treatment by physicians who are experts and (3) the use of controlled tissue dosage.

5. The future of radiation therapy holds great promise. Many agents are under investigation that may enhance the effectiveness of irradiation. However, is is possible for many institutions to achieve a great improvement in results without any additional discoveries provided that physicians simply apply the already known principles of thorough treatment.

Drawings for figures 1, 2 and 3 were provided through the generosity of Smith, Kline and French.

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Surgical Management Of Carcinoma of the Cervix

It is pointed out that early diagnosis is the most valuable factor in treatment of cancer of the cervix, but acceptable treatment by hysterectomy and lymphadenectomy followed by deep x-ray therapy is discussed for all stages. Methods used and results from a 15 year experience is presented.

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This paper was presented at a meeting of the Missouri Division of the American Cancer Society, October 10, 1959.

Treatment of carcinoma of the cervix has been the subject of considerable debate in the last few years. Out of published reports concerning the outcome of patients in clinics using the surgical approach has come logical argument for this method as acceptable treatment for this potentially fatal disease. On the basis of these reports alone, the surgical approach is entitled to an honest appraisal.

One does not need to be reminded that early diagnosis remains the most valuable factor in any treatment of cancer of the cervix for which five-year survivals are to be reported. Nor does one need to be reminded that continued educational efforts are imperative—for physicians as well as the public—if acceptable five-year results are to be realized.

Methods have been studied and instituted in some clinics to give the physician knowledge as to whether or not a cancer has the radiologic susceptibility desirable for treatment of the patient by radiation. If a positive reaction does not occur, he can then subject the patient to extended pelvic surgery. However, this test of susceptibility to radiation has not been standardized by those who use it and other clinics have not been able to reproduce their work adequately enough to permit reliance upon the method as an aid to anticipated treatment. This test of cellular activity for case selection is not available to me, nor is it to most of the men accepting responsibility for treatment of these unfortunate women.

This review encompasses 15 years of experience with extensive hysterectomy and lymphadenectomy followed by deep x-ray therapy. Out of this work has emerged statistical evidence that this combination is an acceptable management for Stage I and Stage II, International Classification, of carcinoma of the cervix. All patients were treated by this combined method and results are tabulated. They are not reported as a surgical feat but only to demonstrate that the five-year survival rate in the local community has been improved and equals or excells all published reports.

The number of patients operated on 10 or more years ago total 41, which is, of course, far too small to be of statistical value. However, a special news bulletin stated that Meigs[1] had reported on 97 women, treated surgically for invasive carcinoma, who had been operated on 10 or more years before. In his series, 72 per cent of the patients with Stage I and 58 per cent of the patients with Stage II lesions had survived 10 or more years and were free of clinical evidence of the disease. In my series of 41 women operated on more than 10 years ago, all except two are alive and apparently free of their malignant disease after 10 years. One woman was killed in an automobile accident more than six years following her operation. Although no autopsy was performed, I had seen her less than two months before her death and considered her clinically well. The other woman, a confirmed alcoholic, died six years after surgery; the autopsy did not show any evidence of malignancy within her body. Meigs' report and my experience would seem to establish the fact that this is not a crippling treatment but instead one which allows these patients to live, in most instances, perfectly normal lives.

The Material

The clinical material of this series is shown in tables 1 and 2 and represents 197 patients operated on by me in the past 15 years, 111 of whom were in Stage I (International Classification), 80 in Stage II, and, in Stage III, six of whom were accepted for operation in the last six years. These were all cases of proved invasive malignancy. No Stage O cases are listed in this report, but all cases have been accepted which have offered reason to believe that the entire lesion could be surgically removed. To date no patient has been refused this surgical treatment, regardless of age, weight or systemic complications. Ages have ranged from 22 to 76 years, with the greater number falling within the 30 to 40 year age group and accounting for 35.2 per cent. It is interesting to note that 22 patients, or 11.4 per cent, were 30 years of age or younger. Their weights have varied from 80 to 300 pounds, 20 having weighed more than 175 pounds.

TABLE I

SURGERY AND POSTOPERATIVE IRRADIATION
197 CASES 1945-1959

International Classification	
Stage I	111 Cases
Stage II	80 Cases
Stage III	6 Cases

These 197 cases represent patients at the Medical School who were admitted on my days of admission and the others from my private practice, the latter accounting for 75 per cent of the total. It becomes immediately apparent that one cannot estimate the number of more advanced cases these referred patients might have represented.

Of the 197 cases, six have been deleted—one because of a mistaken diagnosis, one in which the condition of the patient was complicated by bilateral ovarian malignancy, two in which the adenomatous lesion had arisen from the body of the uterus and metastasized to the cervix, and two Stage III radiation failures.

The Operation

The operative procedure does not need detailed description. The cases are adequately investigated and prepared for operation. Antibiotics are used preoperatively and postoperatively. Sufficient blood is always available for replacement. General anesthesia is used, the type being the choice of the anesthetist. The operative procedure consists of the hysterectomy and bilateral salpingo-oophorectomy, after which a bilateral lymphatic dissection is meticulously carried out, followed by the release of the ureters and the removal of the parametrial tissue from one pelvic wall to the other and from the levator ani muscles upward. The uterosacral ligaments are severed some three inches from their insertion into the uterus, and the rectum is completely released, which adds to the block of tissue removed, along with the upper one third or one half of the vagina. One doubled, two-inch, iodoform gauze is left in the vagina, with the distal ends resting in the obturator area. I have failed to recognize or have not seen the collection of blood or lymph to which reference has been made in published articles. The pelvis is carefully peritonealized, and a retention catheter is left in the bladder. The operating time varies from two and one half to three and one half hours, depending upon the size of the patient, extent of involvement and the amount of bleeding encountered.

As soon as logical after surgery, the patient receives deep x-ray therapy—2,400 r. to four portals, two anterior and two posterior. This is the additional part of the proposed therapeutic program, established at the beginning of the investigation. I recognized that this amount of radiation is below a cancerocidal level, but I am forced to attach some additional advantage to its use, because my five-year survival of cases with proved metastatic cancer is above any reported in the literature today.

Results

Table 2 shows that, of the 137 cases of proved invasive carcinoma of the cervix operated on five or more years ago, 80 were in Stage I (International Classificiation), 54 were in Stage II, and three cases were classified as Stage III. Of the 80 Stage I cases, 69 of the patients were alive

TABLE 2

CARCINOMA OF THE CERVIX
SURGERY AND POSTOPERATIVE IRRADIATION
1945-1954

	International Classification			
STAGE	PATIENTS TREATED	DEAD	SURVIVAL	PERCENTAGE
I	80	11	69	86.2
II	54	15	39	72.2
III	3	1	2	66.6
Total	137	27	110	80.2

One Stage I Case lost to follow-up—considered dead.

and free of demonstrable evidence of disease, an 86.2 per cent five-year survival rate. Of the 54 cases in Stage II, 39 patients were alive and well, giving a 72.2 per cent five-year survival rate. Of the three Stage III patients, two were alive and well. Although one of these patients was subjected to a combined abdominoperineal resection five years ago to eradicate a recurrence, she has remained well and free of evidence of disease since her second operation. This provides an over-all five-year survival rate of 80.2 per cent for the 137 patients operated on five or more years ago.

LYMPH NODE METASTASIS

This group of patients should be of interest to all and is described in table 3. It is in this group that the surgeon is able to establish a diagnosis of advanced disease; whereas, the radiotherapist never knows whether or not his patients harbor malignant cells in distant glands. It is this group about which the radiologists cannot agree as to whether or not they are able to "sterilize" a gland once it has malignant cells within its confines. Admitting that the outcome of 26 cases is statistically inadequate, one must conclude that a 53.8 per cent five-year survival rate in cases in which metastatic nodal involvement has been proved is an acceptable figure for any form of treatment.

TABLE 3

CARCINOMA OF THE CERVIX

Cases Operated 5 Years or More With Node Metastasis

	International Classification			
STAGE	PATIENTS TREATED	DEAD	SURVIVAL	PERCENTAGE
I	7	2	5	71.4
II	16	9	7	43.7
III	3	1	2	66.6
Total	26	12	14	53.8

One Stage II case died of coronary thrombosis more than 3½ years after surgery and was free of disease at time of death. This would have allowed an overall corrected survival rate of 57.6 per cent.

ADENOCARCINOMA

In reviewing the literature, one is impressed by the universal thought that adenocarcinoma of the cervix is radio-resistant and the cure rate demonstrably lower than it is in the squamous type of lesion. This opinion is substantiated in this review of cases. There were nine cases of columnar-cell carcinoma, of which only five patients are alive and well at the end of five years. This is indeed a serious disease and it warrants future study as to a form of treatment which will improve present results.

COMPLICATING PREGNANCY

Twenty years ago, cancer of the cervix complicating pregnancy and death were almost synonymous terms. The cases in this series demand a complete alteration of one's previous attitude toward this malignant lesion. I have operated on 12 patients in whom there was complicating pregnancy and, as shown in table 4, I can present seven women who have been operated on over five years, four of them over 10 years, all of whom are alive and well. Of the 12 cases, seven have been classified as Stage I and the remaining five as more advanced lesions.

TABLE 4

CARCINOMA OF CERVIX COMPLICATED BY PREGNANCY
7 CASES—5.3 PER CENT
1945-1954

Patient	*Date Operated on*	*Inter. Class.*	*State of Pregnancy*	*Condition*
M. A.	12- 1-45	I	6 wks. preg.	A & W
M. H.	2-22-47	I	2 wks. pp	A & W
P. W.	10-16-47	II	6 wks. pp	A & W
P. G.	1- 5-49	I	8 wks. pp	A & W
E. G.	2-27-52	II	4 wks. pp	A & W
J. D.	8-16-52	I	8 wks. pp	A & W
L. D.	12-29-53	I	10 wks. preg.	A & W

CARCINOMA OF THE CERVICAL STUMP

The cases involving a remaining cervical stump have not been separated from the others, and

TABLE 5

CARCINOMA OF CERVICAL STUMP
8 CASES—6.06 PER CENT
1945-1954

Patient	*Date of Hyster.*	*Date of Wertheim*	*Inter. Class.*	*Pathology*	*Condition*
J. T.	1936	3- 9-46	II	Epidermoid	A & W
B. V.	1931	6-30-47	I	Epidermoid	A & W
G. M.	1946	6-23-49	I	Epidermoid	A & W
F. K.	1943	10-31-49	II	Epidermoid	A & W
G. M.	1934	11-17-50	II	Epidermoid	A & W
M. W.	1936	12-28-51	II	Adenoca.	A & W
M. A.	1940	11-11-52	I	Epidermoid	A & W
E. K.	1952	9- 3-53	II	Adenoca.	A & W

the abdominal trachelorrhaphies with gland dissection are a part of the entire report. To date 13 patients have been operated on, eight of whom fall within the five-year group and all of whom are alive and apparently free of anything suggestive of malignancy, as outlined in table 5. The technical difficulties would be obvious, but nothing was encountered except distortion, induration and fixation. This group warrants consideration since it is considered by all that these patients are not treated as satisfactorily as if the uterus had remained. Fortunately, these patients come early, since bleeding signals an abnormality to these women, and they quickly seek advice.

COMPLICATIONS

Any form of treatment for the cure of a lethal disease will be accompanied by complications. Were it not for the urinary fistula, this surgical treatment would not be viewed with such apprehension as it is today. This complication is probably greater in the cases treated by surgical management than in those treated by x-ray and radium, but this difference is readily absorbed by the gross difference in the five-year survivals. Table 6 is self-explanatory. In addition to the complications in the urinary tract, there has been but one small rectovaginal fistula which caused the patient no inconvenience and did not interfere with sexual activities. There have been two instances of some persistent leg pain where the sciatic plexus was traumatized in an effort to control exsanguinating hemorrhage. Only three cases of mild phlebitis were encountered, two of which had had a similar complication involving the same leg at a previous operation. There have been two patients, neither of whom is in the five-year series, who have returned with palpable masses at the periphery of the pelvis which were considered recurrences. Both were operated on and tense peritoneal cysts of benign character were found in each case. These may have been unrecognized lymphoceles.

TABLE 6

COMPLICATIONS
197 CASES 1945-1959

	No. Cases	*Per Cent*
Ureterovaginal fistulae	17	8.6
Ureterovaginal fistulae, healed spontaneously	8	
Ureterovaginal fistulae, nephrectomy	2	
Bil. ureterovaginal fistulae, ureterocutaneous anastomosis	4	
Ureterovaginal fistulae, leaking at time of death	1	
Ureterovaginal fistulae, no reparative efforts have been made	1	
Ureterovesico transplants	1	

In one of these cases, a ureter was severed at surgery.
Seven cases were 60 years of age or over.
Three cases had associated vesicovaginal fistulae.
These cases do not include radiation failures.

These complications worry the operator, of course, but I have accepted them as a calculated percentage. I am sure that cases presenting unusual pathologic lesions of any gynecologic nature present complications of equal severity but do not prevent one from accepting the responsibilities. I have observed the complication of the bladder relative to troublesome atonia with altered micturation. These difficulties are of less moment, in fact are considered minimal in our private patients, but are a little more troublesome in clinical patients who return to their local physicians. It is recognized that the clinical patients are often from a lower economic and intellectual group, but I question whether such factors constitute the difference in the two groups. Their physicians are often not as interested in their complication as I am. Consequently, the additional effort which prevents these problems from becoming troublesome is not made and atonia may be persistent.

MORTALITIES

I am indeed sorry to report that my mortality rate is above that of other authors, and certainly my figures cannot be compared with those of Meigs.[2] In my group of five-year cases, there were three hospital fatalities in the 137 operations, averaging 2.2 per cent. One patient died of generalized sepsis with multiple abscesses, one from a verified blood transfusion reaction, and the other exsanguinated on the operating table. I believe one should not be too discouraged by this percentage, since there was no trained operative team then, and the entire program was comparatively new in the hospitals in which these patients were operated on.

This acceptable figure has not continued, as shown in table 7, and today I have had seven or 3.5 per cent hospital fatalities in the 197 cases I have operated on. In addition to the three hospital fatalities, one patient died from cardiac arrest, another from a pulmonary embolus, two exsanguinated from the operation, and the other was found in profound shock 20 minutes after being returned to her bed and died from irreversible electrolyte imbalance 70 hours later.

TABLE 7

OPERATIVE DEATHS
197 CASES 7 CASES 3.5 PER CENT

1948	Cardiovascular collapse after extraperitoneal abscess. Sepsis.
1950	Blood transfusion reaction—began to bleed from entire operative bed just as pelvis was being peritonized.
1953	Exsanguination—possible blood dyscrasia. Had pernicious anemia. Possible blood transfusion reaction.
1953	Cardiac arrest—died 8 hours later.
1954	Pulmonary embolus on eighth postoperative day.
1955	Exsanguination—probably blood transfusion reaction. Suddenly began to bleed from entire operative bed.
1956	Immediate postoperative shock. Total anuria for 24 hours. Died 70 hours later in uncontrollable electrolyte imbalance.

Although impossible to prove, I seriously suspect some type of fibrinolysis or weeding out of the platelet mechanism developed in some of these patients receiving citrated blood, resulting in a disturbance of the clotting mechanism which may have been responsible for their death. I am attempting to evaluate this problem.

This mortality rate is too high, but I must repeat that, despite the accusation by some discussants, we have not been selective in our cases. To date no patient, who has been sent to us and who would accept surgery, has been refused surgical management, regardless of age, weight or systemic complications. I recognize that obese woman do not lend themselves to meticulous dissection, but they do not present themselves either as ideal patients for irradiation. I am aware of the fact that complications and mortalities will occur in the older women, but 24 of these patients were 60 years of age or older and I, as well as they, am glad that surgical approach was not refused them.

I believe that this rate should gradually show a reduction, since I now have the same assistant at every operation and the entire operating group has become more familiar with the dissection to be carried out in this procedure. Deaths occur in any treatment adequate for cure of a disease of such lethal potentialities. Indeed, tragic deaths do occur in any form af surgery, but they will also occur in the radiologically treated patient. Holzaepfel and Ezell[3] have reported four deaths of patients with involvement comparable with those here reported, who were lost in preparation for administration of treatment or directly as the result thereof. I, and everyone who has treated patients with a full course of radiation, have had experiences similar to those reported from Columbus, Ohio.

DISCUSSION

It was my intention, when I began this work 15 years ago, to evaluate the surgical approach for the treatment of carcinoma of the cervix, Stages I and II, International Classification, and to determine whether or not the results could equal or improve upon cases treated by irradiation alone. I have grouped all cases together—cancer complicating pregnancy and cancer of the cervical stump having been included in this report. I have deleted the irradiation failures because I believe that they should be considered separately. Fletcher,[4] from the M. D. Anderson Hospital in Houston, Texas, groups the cervical stump cases separately and, out of 47 cases treated by radiation, he reports only 49 per cent of five-year apparent cures. I insist that one should be interested in what one can accomplish at home and not attempt to compare results with institutions at some distant point. In a review of cases in our institution, it was found that over a given space of time 278 cases of Stage I and Stage II had received a full course of treatment with a survival of 132 cases or 47.4 per cent. Although this was discouraging, it was slightly better than the 33,772 cases reported in the *Annual Report on the Results of Treatment in Carcinoma of the Uterus*[5] with a five-year survival rate of 45.8 per cent or 14,582 cases.

Statistical advantage is of no consequence unless it happens to be one's own patient, and the 30 per cent advantage in my local community has yielded but a hollow victory.

For comparison with other clinics, I have for consideration some comparative figures from clinics familiar to all. These are presented in table 8 and have been taken from published articles, material presented at meetings and personal communications. They are presented for comparison with the results of my investigation of the surgical approach followed by 2,400 r. measured in air delivered through four portals by a 260 kilo-volt machine. My group is small but comparable with similar small groups of some other reported figures and, I believe, must be accepted as establishing a trend from which conclusions may be drawn. Needless procrastination concerning treatment merely fosters defeat.

TABLE 8

COMPARATIVE RESULTS
FIVE-YEAR SURVIVALS

International Institution		*Stage I* Cases	*Stage I* Rel. Sur. Per Cent	*Stage II* Cases	*Stage II* Per Cent	*Stages I and II* Rel. Sur. Per Cent
M. D. Anderson, Houston Gilb. H. Fletcher	1947-52	64	89	254	66	70.7
John Wall, Houston	1945-52	36	79.1	29	51.7	66.1
Schmidt—Chicago Irradiation	1933-52	129	71.3	155	43.2	55.9
St. Louis, Mo. A. N. Arneson	1946-51	103	77	163	55	63.5
Johns Hopkins Te Linde	1950-51	39	74.5	52	40.3	53.8
University of Iowa John H. Randall	1942-51	210	68.5	292	41.4	52.07
Yagi—Okayama Surgery—no irradiation		59	89.8	424	58	61.07
J. W. Kelso, Oklahoma City Surgery—X-ray	1949-54	80	86.2	54	72.2	80.6

TABLE 9

RELATIVE FIVE-YEAR RECOVERY RATE, OBTAINED FROM THE ANNUAL REPORT ON THE RESULTS OF TREATMENT OF CARCINOMA OF THE UTERUS

(Total Number of Patients Reported From Institutions Reporting 100 or More Cases)

	INTERNATIONAL CLINICS *Int. Classification*		*Percentage Survival*		KELSO SERIES 1945-1959 *Int. Classification*		
Stage	Patients Treated	Survival	Rel.	Rel.	Survival	Patients Treated	Stage
I	16,822	10,308	61.3	86.2	69	80	I
II	35,212	14,854	42.2	72.2	39	54	II
Total	52,034	25,162	48.3	80.6	108	134	Total

Our patients are accepted for urgent consideration of what we believe is one of the correct definitive treatments.

Today routine use of cytologic smears gives physicians an immediate answer to the problem of early diagnosis of carcinoma of the cervix. One may state, without fear of contradiction, that if such tests are carried out routinely as a part of the annual examination of all patients, only seldom would a woman perish from this disease. For various reasons which alter the logical thinking of some women—timidity, economic situations, religious beliefs or merely antagonism toward doctors—true deep invasive cancer of the cervix will continue to be seen and will demand definitive treatment if life is to be saved. Therefore, it behooves everyone to encourage all educational efforts, to examine patients thoroughly, and to treat patients with the best possible modalities, and this, in my opinion, is adequate surgery followed by deep x-ray irradiation.

It has been implied that reports such as this one will be harmful inasmuch as inadequate surgery will be done under the pretense that the patient has been subjected to definitive surgery. This has occurred, but pelvic surgeons should not be held responsible for the actions of dishonest operators any more than they should be expected to correct the practice of those doctors who secure radium from radium rental companies for insertion in accordance with the accompanying instructions.

(Continued on page 586)

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Carcinoma in Situ of the Uterine Cervix

PERHAPS THE most important feature of the subject of carcinoma in situ of the cervix (carcinoma of the cervix, Stage 0) is the role it might play as a precursor to invasive cervical carcinoma. Resolution of this problem is not simplified when one encounters some variation and difference of opinion in the criteria by which the diagnosis is made pathologically. In addition, variations in the eventual treatment methods of these lesions serve further to confuse the issue in the analysis of clinical data.

The basic pathologic criteria, however, seem fairly well established and this has been summarized by Peale.[3] Microscopically, the epithelium shows loss of stratification, loss of nuclear polarity, and cellular pleomorphism with increased and often abnormal mitotic activity throughout the entire thickness of the epithelium. The lesion should be confined to the natural surfaces and this may include the lumina of the endocervical glands. Loss of maturation is significant. These criteria are subject to different interpretations by different pathologists, however, and evaluation of a given microscopic slide may result in several opinions by various interpreters.

Similarly, the variation in methods of diagnosis of carcinoma in situ of the cervix contributes to the difficulty in correlating treatment and results obtained from different clinical studies. In an effort to resolve some of these confusing points, the material at the Ellis Fischel State Cancer Hospital, Columbia, Missouri, has recently undergone review. Between 1944 and 1959, 68 cases of carcinoma in situ of the cervix have been recorded. Certain of these cases were referred to the hospital for a primary gynecologic complaint, but many were referred for other diseases in which carcinoma in situ was discovered as an incidental finding. Routine cytologic screening was not performed on all female patients seen in the clinic in that the early portion of this series antedates the development and clinical acceptance of this procedure.

Carcinoma in situ of the cervix is discussed as to the role it might play as a precursor to invasive cervical carcinoma. A series of 68 cases of carcinoma in situ between 1944 and 1959 at the Ellis Fischel State Cancer Hospital is presented. The importance of periodic pelvic examination and cytologic testing in the early diagnosis of neoplastic diseases of the cervix is stressed.

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AGE INCIDENCE

The average age of patients with carcinoma in situ is regarded to be 10 years younger than that

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Surgical Management—Continued

CONCLUSIONS

1. The therapeutic regimen has been outlined.
2. Early diagnosis is still the secret of improved survival rates; and, with methods available for cancer detection, rarely should a woman die of this disease.
3. The results of my 15 years of effort have been described and tabulated.
4. The five-year survival rate of patients having metastatic cancer in lymph nodes has been presented.
5. The seriousness of adenocarcinoma of the cervix has been substantiated.
6. The outcome of cases complicating pregnancy and of the cervical stump is discussed.
7. The author asks that you give his experience consideration.

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of patients with invasive cervical carcinoma. Table 1 indicates the incidence by age group of those cases. The youngest patient was 21 years of age and the oldest was 78. The peak incidence of in situ carcinoma of the cervix occurred in the 40 to 49 year age group and over one half of the patients were between 30 and 49 years of age.

TABLE 1

INCIDENCE BY AGE GROUP

Age	*Number Patients*
20-29	8
30-39	15
40-49	20
50-59	13
60-69	5
70-79	7
	68

RACIAL INCIDENCE

There were 62 white patients and six Negro patients in the series. This is a higher ratio of Negro to white patients than the overall ratio of the hospital, although the small number of patients in this series makes this statistic insignificant.

MARITAL STATUS

Sixty-seven patients were or had been married. One patient was single but had as a chief complaint that of postcoital bleeding.

PREGNANCY AND MENOPAUSE

Table 2 indicates that the majority of these individuals experienced multiple pregnancies prior to the onset of this disease, only four such individuals being nulliparous. In keeping with the earlier age incidence of this disease, a larger number of patients were found to be premenopausal at the time the diagnosis was made.

TABLE 2

PREGNANCY HISTORY

Pregnancy History		*Menstrual Status at Time of Diagnosis*	
None	4	Premenopausal	39
1-2	14	Postmenopausal	25
Over 2	42	Unknown	4
Unknown	8		
	68		68

Eleven patients in this series had had previous gynecologic surgery at some time prior to the diagnosis of carcinoma in situ. These procedures were quite variable, being represented by various combinations of salpingectomy, oophorectomy and subtotal hysterectomy and would appear to have no direct bearing on the development of a disease of the cervix.

SYMPTOMATOLOGY

The chief presenting complaints of these patients are listed in table 3. It is important to note that 15 patients (22.1 per cent) were completely asymptomatic and that these lesions were discovered by routine pelvic examinations with biopsies. In addition, many of the abnormal bleeding episodes referred to were quite minor in degree and characterized by slight menstrual irregularity, minimal spotting or slight menopausal menorrhagia. This suggests that such minor abnormalities in the menstrual history warrant more than casual attention by the physician in the form of examination and cytologic smear or biopsy of the cervix to eliminate the possibility of occult in situ carcinoma.

TABLE 3

CHIEF PRESENTING COMPLAINTS

Presenting Symptoms	
Abnormal bleeding	38
Unusual discharge	3
Bleeding and discharge	3
Abdominal or vaginal pain	7
Dysmenorrhea	1
Asymptomatic	15
Unknown	1
	68

EXAMINATION

Pelvic examination revealed findings varying from normal cervices to grossly abnormal organs. Primary findings by examiners are shown in table 4. Although to inspection an abnormal cervix was the most common finding, eight cases presented with clinically normal appearing cervices and the diagnosis was achieved by resorting to random cervical biopsy.

TABLE 4

PRIMARY FINDINGS

Major Physical Finding	
Erosion, ulceration, granularity, eversion, nodularity or various combinations	43
Cervical polyp	4
Cervical laceration	5
Plaques on cervix	1
Easily bleeding cervix	3
Vaginal mass or urethral lesion with normal cervix	2
Adnexal mass	1
Normal cervix	8
Cervix not seen due large abdominal mass	1
	68

Diagnosis

Methods of definitive diagnosis of the lesions are tabulated in table 5. The case indicated as postoperative diagnosis had a carcinoma of the vagina and a normal appearing cervix. An anterior pelvic exenteration was performed and a carcinoma in situ was discovered as an incidental finding in the endocervical canal.

TABLE 5

METHODS OF DEFINITIVE DIAGNOSIS

Method of Diagnosis	
Cervical biopsy	27
Biopsy and cold knife conization	26
D & C and cervical biopsy	14
Postoperative diagnosis	1
	68

Because the microscopic picture of carcinoma in situ is often noted in sections of tissue adjacent to an invasive cancer, it has become a generally recognized fact that cervical biopsy alone is inadequate for the definitive diagnosis of carcinoma in situ. The majority of these diagnoses made by biopsy alone were done in the earlier years of the study whereas, recently, conization has been performed more routinely. It is significant that in three patients carcinoma in situ was found in the endocervical curettings from a diagnostic dilatation and curettage of the uterus whereas cervical biopsy specimens were normal.

Treatment

Table 6 indicates the method of treatment in these individuals. The untreated group of nine cases comprised individuals of advanced age, precarious general health, or malignant disease problems of other organ systems which took precedence over the treatment of the in situ carcinoma of the cervix.

TABLE 6

METHODS OF TREATMENT

Treatment	
Transvaginal radiotherapy	14
Hysterectomy, bilateral oophorectomy	12
Conization	13
Hysterectomy, unilateral oophorectomy	11
Hysterectomy	3
Radium	2
Transvaginal and external radiotherapy	1
Radium and external radiotherapy	1
Radium followed by hysterectomy	1
Anterior pelvic exenteration	1
No treatment	9
	68

Early in the series, radiotherapy was employed more liberally as a definitive treatment measure whereas, recently, a more direct surgical approach has been applied.

Residual Tumor

It is worthy to note what portion of hysterectomy specimens contained residual tumor following certain types of diagnostic procedures. Kreiger and McCormack[2] in reporting a series from the Cleveland Clinic noted that of 37 patients, who had conization followed by hysterectomy, only four patients had residual tumor in the hysterectomy specimen. Peightal[4] emphasizes that even in experienced hands residual tumor may remain following conization.

The number of patients with residual tumor in hysterectomy specimens is compared with the number showing no residual tumor in table 7.

TABLE 7

RESIDUAL TUMOR IN HYSTERECTOMY SPECIMEN

Method of Diagnosis	*Residual Tumor in Hysterectomy Specimen*	*No Tumor Present*
Cervical biopsy alone	14	3
Conization of cervix	3	7

It becomes obvious that biopsy alone does little to eradicate the disease whereas, on the other hand, conization of the cervix, though more effective, does not guarantee complete removal of the tumor.

SURVIVAL

There were 33 patients treated prior to September 1954 that were eligible for five year follow-up studies at the time of this survey. The overall survival rate and corrected survival rate is shown in table 8. The elimination of five cases lost to intercurrent disease yields a corrected survival figure of 85.7 per cent. Four cases were lost to follow-up and were included as treatment failures.

TABLE 8

SURVIVAL RATES

Survivor Rate (5 Years)		
Number patients	33	
5-year survivors	24	= 72.7%
Corrected Survivor Rate		
Number patients	33	
Lost to intercurrent disease	5	
5-year survivors	24/28	= 85.7%

Table 9 shows the correlation between the types of therapy and the results obtained. Two of the patients treated by conization alone were lost to follow-up. One patient treated by transvaginal roentgentherapy and one patient receiving no treatment at all were lost to follow-up. Among those becoming indeterminate due to intercurrent disease one patient died of lymphoepithelioma of the nasopharynx, one died of pseudomucinous adenocarcinoma of the ovary, one died of inoperable carcinoma of the gallbladder, one died of cerebrovascular accident, and one committed suicide.

TABLE 9

TYPES OF THERAPY AND RESULTS

Survivors According to Method of Treatment

THERAPY	NUMBER PTS. (CORRECTED)	5-YR. SURVIVORS	PER CENT
Conization	6	4	66.6
Transvaginal radiotherapy	13	12	92.2
Hysterectomy	4	4	100.0
No treatment	5	4	80.0
	28	24	

INVASIVE CANCER

One of the points of major interest in this study is whether any of the patients developed invasive cancer subsequent to the diagnosis of carcinoma in situ. In this group of 68 cases, four patients later developed invasive carcinoma. A brief résumé of their histories follows.

CASE REPORT

Case 1. A 46 year old white female underwent total hysterectomy for fibroid uterus, at which time an incidental finding of in situ carcinoma was discovered. One and one half years later a mass was felt in the vaginal cuff and a biopsy revealed a diagnosis of invasive epidermoid carcinoma. Treatment by external and transvaginal roentgentherapy was conducted and the patient was alive and well five and one half years later.

Case 2. A 54 year old white woman was first seen for malignant melanoma and an asymptomatic cervical polyp was removed and a diagnosis of atypism of the epithelium made. Cervical biopsies one year later were negative. Five years later the patient presented with the complaint of vaginal bleeding and a cervical biopsy revealed in situ carcinoma, although clinically the pelvic findings suggested a Stage III invasive carcinoma of the cervix. The patient received roentgentherapy and was well two years later. She expired three years following roentgentherapy from generalized metastases, presumably originating from the melanoma.

It would have clarified the clinical course, in this particular case, had a cervical conization been performed to establish or rule out the presence of invasive carcinoma at the onset of treatment.

Case 3. A 55 year old white female, 10 years postmenopausal, had a routine cervical biopsy which revealed carcinoma in situ. Repeat biopsies and a dilatation and curettage revealed in situ carcinoma in the endocervical curettings. Transvaginal roentgentherapy was administered and the patient did well until six and one half years later, at which time invasive carcinoma of the cervix was encountered. This was re-treated by external cobalt therapy and transvaginal roentgentherapy; no follow-up is available on this particular case.

Again, a conization of the cervix would have helped clarify the subsequent development of invasive carcinoma.

Case 4. A 57 year old white female, one year postmenopausal, had abnormal vaginal spotting. Conization showed a carcinoma in situ to be present and no further therapy was performed. Seven years following this conization routine cervical biopsy revealed carcinoma in situ. Hysterectomy was performed and a focus of invasion was found. This patient's follow-up is only six months to date.

DISCUSSION

Features such as the multiparity of this group of patients is in keeping with our knowledge of cervical neoplasms. The fact that the peak age incidence of in situ carcinoma occurs in an earlier age group is worthy of note. More than one half of these cases were premenopausal. More important, perhaps, is the fact that a significant number of these individuals do not have symptoms referable to the reproductive tract when the diagnosis of carcinoma in situ is made. In keeping with this is the importance of periodic routine pelvic examinations and cytologic tests or biopsies of the normal appearing cervix if the diagnosis of the disease is to be made early.

It is not possible from this small group of patients to evaluate the relationship of in situ carcinoma to invasive carcinoma of the cervix. TeLinde, Galvin, and Jones[6] reported a series of cases indicating that many patients with invasive carcinoma had abnormal biopsies several years prior to the diagnosis of their disease. Peterson[5] reported a group of 127 patients who had diagnoses of carcinoma in situ and were then followed without further therapy. He observed that 4 per cent developed invasive cancer within one year, 11 per cent within three years, 22 per cent in five years, and 33 per cent in nine years. Unfortunately, some diagnoses were made without the benefit of conization but merely on cervical biopsy alone. Therefore, it is not possible to rule out the presence of invasive carcinoma from the time of the first examination.

Survival statistics in the group studied indicate that the form of therapy has little significance in the end results, all of which were favorable. This has suggested to some authors that radical therapy of this disease is not necessary. Those who advocate the more conservative approach (conization only) stress the necessity of careful follow-up of these cases by cytologic smears. Kreiger and McCormack[1] reported a group of 61 patients treated by adequate conization and followed for periods of six months to seven years. Only two such cases had positive Papanicolaou smears at any time following the conization. Accordingly, they regard conization as adequate treatment in the majority of cases and recommend hysterectomy in only three categories of patients: (1) those who had persistent positive smears following conization, (2) those who could not be followed by smears because of stenotic cervical canals, and (3) those who had other evidence of uterine disease.

Current Management

The present plan of treatment of carcinoma in situ of the cervix at the Ellis Fischel State Cancer Hospital is essentially as follows:

1. The presence of invasive carcinoma is ruled out by cold knife conization after the presence of an in situ carcinoma has been established by cervical biopsy.
2. Total hysterectomy is performed in good risk patients beyond the child-bearing age. Poor risk surgical patients are observed periodically by cytologic tests after conization.
3. Younger individuals desiring additional children are treated by cold knife conization and followed by periodic cytologic tests.
4. If no additional children in the family are desired a total hysterectomy is performed, assuming the patient to be a good operative risk.

It is conceivable that this management is in excess of that required to adequately control carcinoma in situ of the cervix as suggested by the recent literature. However, until the exact nature of the disease, carcinoma in situ, is better appreciated and particularly the role it plays in relationship to invasive carcinoma of the cervix is better understood this outlined approach to this problem will be followed at this institution.

Summary

1. Variation in the pathologic interpretation of specimens, diagnostic procedures used to obtain specimens, and treatment measures lends some confusion to the exact nature of carcinoma in situ of the uterine cervix.
2. Carcinoma in situ occurs in a slightly younger age group than invasive carcinoma of the cervix.
3. A significant number of cases may be totally asymptomatic when the disease is first diagnosed.
4. A normal appearing cervix does not rule out the presence of a neoplastic process and routine biopsies or cytologic tests should be employed.
5. The control of this disease in universally good, little variation being encountered with respect to the various treatment measures used.
6. A definite relationship to invasive carcinoma of the cervix seems to exist. It is not possible to determine from available information how often in situ carcinoma will become invasive.
7. Routine pelvic examinations with cytologic screening tests should yield a higher incidence of early diagnoses of this disease.

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Today's Physician and Venereal Disease

The Missouri State Medical Association Committee on Control of Venereal Disease in its 1959 meeting considered venereal disease problems both state wide and nationally. This discussion is an attempt to bring to the attention of physicians some facts about the Committee's problems, and to refresh thinking about the diagnosis and treatment of syphilis.

Strides forward have been made in venereal disease control in the continental United States. The highest rate for total syphilis was in 1943, for primary syphilis and gonorrhea in 1947. Reported total syphilis declined steadily until 1956 when the United States Public Health Service reported the first increases in syphilis since 1947. Since 1955, there seems to be a leveling off or plateau of reported cases which may be misleading unless one also is aware that the rates of infectious syphilis as well as gonorrhea have been rising slowly and consistently to the present. A similar phenomenon has taken place in the State of Missouri.

"In 1959, the reported gonorrhea case rate was 1953.9 cases per 100,000 population, which is the highest rate in Missouri since 1948 when reported gonorrhea cases were in their peak years in the United States. The Missouri increase in gonorrhea cases in 1959 as compared to 1958 was 11 per cent, somewhat higher than the national increase of 8 per cent. In addition, selective blood testing continues to produce high syphilis yields. In 1957, Missouri tested 21,101 individuals largely as the result of house to house and street surveys, and found that 9.8 per cent had positive test results. In 1958 and 1959 the selective testing yields in Missouri increased incisively while the national yields started to wane. In 1959, Missouri's selective blood testing results were two and one half times the national average yield. The selective rate increased to 13.8 per cent and about 3 per cent of the 8,102 persons tested in Missouri were brought to treatment for the first time, and another 2 per cent needed additional treatment. In 1959 most of the selective testing surveys were conducted in St. Louis and Kansas City. In 1959 a special study on the follow-up premarital serologic reactors in the City of St. Louis indicated that over 1 per cent of the total 13,804 tested needed treatment for syphilis. The study included the majority of marriage applicants in the City of St. Louis.

"These results demonstrate that a large reservoir of latent syphilis exists in certain groups in Missouri. Many latent infections apparently are escaping epidemiological and case finding methods."[1]

With the dramatic decline in the incidence of syphilis following the advent of penicillin, there was a general relaxation of venereal disease control programs through the country. Budgets were slashed, personnel reduced, public clinics closed and the highly developed epidemiologic program for finding venereal disease was seriously interrupted. The use of treatment not only brought the actual incidence of syphilis down but also created an artificial decrease in reportable cases.[2]

Most undiscovered syphilis is latent syphilis. This hidden disease presents no signs or symptoms other than those of a positive serological test for syphilis (S.T.S.).

Dr. Thomas Parran, in 1932, stated "Syphilis can never be controlled while more than one half of the cases are not recognized for more than one year after onset." Every case of early or late latent and late syphilis represents a failure of previous case findings. In 1959, primary and

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The Committee on Control of Venereal Disease is of the opinion that it is important to bring to the attention of Missouri physicians an up-to-date article concerning the basic facts in the diagnosis and treatment of venereal disease. This article is the result of this action of the Committee. The Committee is composed of Drs. Edwin M. Powell, Springfield, Chairman; T. E. McMillan, Kansas City; E. M. Cannon, St. Louis; A. W. Neilson, St. Louis; Robert B. Bristow, St. Joseph, and John E. Byrne, St. Louis.

Dr. Neilson is a past chairman of the Committee and has long been interested in the problems connected with venereal disease control and has been a Consultant Syphilologist to the U. S. Public Health Service.

secondary syphilis had increased to 8,178 cases, an increase over former years and the highest total since 1954. Early latent syphilis stood at 19,592, an increase since 1958. If one looks as far back as 1954 and observes the ratio between primary and secondary and early latent syphilis, one then begins to realize that there are approximately three times as many early latent cases found as primary and secondary cases. Therefore, for every case of primary or secondary syphilis discovered for the five year period, at least three other cases were not found. Those that were discovered were found after they had passed through the infectious period. More cases were missed than found, therefor, and those missed were potential hazards all during the primary and secondary stages of their disease. It is thus seen that continued successful prevention and control of venereal disease will depend upon the availability of necessary control facilities, control procedures and trained personnel.

Contact tracing must be carried on. Studies have shown that while private physicians are reporting almost half of all the cases of infectious syphilis reported, most of the cases are not being interviewed for contacts either by the doctor or by others. If national indexes are applied, one finds that through failure to interview known reported cases of symptomatic syphilis during the last five years, 3,000 additional primary and secondary cases were free, through neglect, to spread their diseases at will.

The Missouri Venereal Disease Committee believes that a closer cooperation between health departments and private physicians is not only desirable but necessary in view of the increasing statistical evidences of venereal disease in Missouri and the nation.

It has been known since Lendsteiner's work in 1907 that reagin is not a specific antibody for syphilis, so that the report of a positive test does not necessarily preclude that the patient has syphilis. The sensitivity of reagin tests can be so adjusted that most people with syphilis react positively to the test, while most people not having syphilis will fail to react. It is also known that a certain percentage of nonsyphilitic persons also react positively to the test. Since the decline of great masses of syphilis, and the simplification of the therapeutic regimen for the disease, as a result of the discovery of penicillin, the accent is now an diagnosis, which has been made more difficult. Treatment at one time was so elaborate and varied that the generalist and others preferred to refer cases of venereal disease to the venerealogist-syphilologist with his specialized knowledge. Other factors which complicate diagnosis are the apparent increases in the incidence of diseases associated with biologic false positive reagin reactions and the multiplicity of new sero diagnostic tests for syphilis. H. Eagle, Krag and Loubera[3,4] have indicated that the general incidence of reagin reactivity in college student groups and the normal population is about 25 per 100,000. As the amount of syphilis decreases in the population, the ratio between true reactors and nonsyphilitic reactors changes until the value of the reaction as a specific diagnostic test for syphilis is lost to the physician. A clinician must, therefore, have other criteria available in addition to the positive serology in order to make a positive diagnosis of syphilis and he must also determine whether some other disease or condition exists which is responsible for the positive reagin reaction.

Warfield Garson[5] points out that in the last decade laboratory researchers have directed their attention to developing more specific tests for syphilis. They have done this by directing their attention to studying the Treponema Pallidum, the etiologic agent of the disease, in an attempt to develop a more specific antigen for serodiagnostic testing. If a specific antigen, reacting only with antibodies developed during the course of a syphilitic infection could be found, the problem of the biologic false positive reactor with standard antigens also would be solved. Many tests were thus devised, beginning with the Treponema Pallidum immoblization test (T.P.I.) in 1949, all of which strive for increased diagnostic specificity. Effective inexpensive tests with fairly well standardized antigens from the Reiter organism have been developed and the antigens are available commercially. Apparently, the chemical agent obtained from the Treponema Pallidum and the nonpathogenic Reiter Treponema is immunologically and serologically identical so that antigens made from the Reiter organism can be used in the serodiagnosis of syphilis with confidence.

The Fluorescent Tryponemal Antibody Test for syphilis (F.T.A. test) is another attempt in a group of serologicol tests aimed at giving the same information that can be obtained from the T.P.I. test, but which can be done more inexpensively, and performed by other than highly trained laboratory technicians. Olansky-McCormick concludes that the F.T.A. test apparently measures the same antibody as the T.P.I. test and shows great promise as a future aid in the resolution of problems of interpretation of reactions in serologic tests for syphilis.[6] Studies are being conducted with fluoresceine antibody technics, using not only Tryponema Pallidum, but also the Neisseria gonorrhea and Hemophilus ducreyi. "Early findings indicate that the fluorescent antibody technics may have application not only in the identification of microorganisms and detection of specific antibodies, but also in the study of the antigenic complexes of microorganisms."[7]

It must be understood, however, that no laboratory procedure is infallible and that no laboratory test diagnoses syphilis. These tests only inform the physician as to the immunologic status of the patient in relation to the antibody being tested. To again quote Dr. Warfield Garson, Research Professor and Head of the Department of Experimental Medicine, School of Public Health, University of North Carolina, who has made an exhaustive study of the laboratory diagnosis of syphilis: "For the full exploitation of the research advances in this field, there is simply no substitute for a physician well informed about syphilis as a disease, well informed about his patient, and well informed about the implication of the test result he receives from the laboratory."

DIAGNOSIS AND TREATMENT OF SYPHILIS

Syphilis may be divided into an early and late classification and as such represents almost two separate diseases. Early lesions are self limited and highly infectious and the Treponema Pallidum may be found in them. Late lesions, when occurring, are chronic, destructive to surrounding tissues and are usually not infectious. Relapse, or reinfection can follow cure of early syphilis due to inadequacy of therapy or to reexposure to an infectious source. Late syphilis in its chronicity usually becomes refractive to fresh lesions.

The immunologic responses of the body are such that reinfection rarely occurs following the cure of late syphilis. Following the treatment of early syphilis, the S.T.S. tends to become negative, or to fall to low titers within a year or eighteen months after adequate therapy. The S.T.S. tends to fall in titer but little in treatment of late syphilis, regardless of kind or amount of therapy.

DIAGNOSIS OF EARLY SYPHILIS

It is true that there are cases in which syphilis apparently is acquired without demonstrable, or a history of, early lesions. However, the diagnosis of primary and secondary syphilis depends on the presence of lesions on the skin or mucous membranes.

a. *Primary Stage.*—The chancre may be diagnosed by dark field demonstration of the Treponema Pallidum in serum from the primary chancre. The S.T.S. may be negative quite early, but in two to three weeks should become positive and should be repeated frequently during this period, if negative results ensue. The S.T.S. titers should then rise rapidly. A history of exposure should be obtainable.

b. *Secondary Stage.*—The numerous types of secondary syphilides which may occur on skin or mucous membrane represent an initial reaction of those tissues to the Treponema Pallidum carried to them through the blood stream, lymphatics and intercellular spaces. The early syphilides may be dark fielded and a good technician can usually demonstrate the Spirochaeta Pallidum. The S.T.S. is positive and usually has a high titer. Titers vary, however, with individual tissue response due to the variable resistance of the host and the virulence of the invading organism. Be cautious of making a diagnosis of secondary syphilis in the absence of any demonstrable lesions and on S.T.S. with titers less than 1 to 4.

c. *Early Latent Syphilis.*—This is of less than four years duration. The diagnosis of this stage of syphilis, about which there is considerable difference of opinion as to just how many years after the initial infection should be considered as the dividing line between early and late, is made by a positive S.T.S. and a history of previous initial lesions on the skin, genitalia or mucous membranes. One hopes for a positive S.T.S. that can be accurately dated. Ask about "hip shots," or treatment for "bad blood" and try and determine the amounts and kind of any former therapy.

TREATMENT OF EARLY SYPHILIS

1. Benzathine Penicillin G—2,400,000 U should be given as a single treatment by injecting 1,200,000 U in each hip.

2. Procaine Penicillin in oil and aluminum nonastearete (PAM) 4,800,000 U should be given by individual injections of 1,200,000 units every two to five days.

Penicillin remains the drug of choice for the treatment of syphilis. Increasing experience serves only to confirm that it is by itself highly effective and that the addition of other drugs adds little to its effectiveness. Organic arsenicals are no longer justifiable. Injection of bismuth is of limited value only as preliminary treatment in some cases of late syphilis. There may be some that will feel that a single dose of 2,400,000 U

Benzathine Penicillin G is not enough penicillin. In the treatment of early syphilis ten daily injections, each of 600,000 units of PAM suffice to cure 95 per cent of cases. It is a matter of individual preference and each patient is an individual problem. It has been shown, however, that a single intramuscular injection of Benzathine Penicillin provides an effective level of blood penicillin for two weeks or more and is as effective as a course of procaine penicillin G in oil totaling 4.5 million units.

Late Syphilis.—It is probable that 60 per cent to 70 per cent of persons with late syphilis never become symptomatic. They do not develop any clinical evidence of late lesions. If such late lesions do occur they may be either chronic, diffuse, inflammatory and degenerative lesions, or gummata. The chronic, diffuse, inflammatory and degenerative lesions are chiefly found in the cardio-muscular and central nervous system tissues. They begin early in the chronic stage but rarely produce significant signs or symptoms for from eight to 15 years. Gummata may occur in any tissue other than the intestines and female reproductive organs at any time in the late stages of syphilis.[8] The symptoms develop rapidly and are probably allergic due to contact of sensitized tissues with the Treponema Pallidum.

Late Latent Syphilis.—This by definition represents an asymptomatic infection diagnosed solely by means of serologic tests for syphilis and by history. It is necessary to rule out asymptomatic neurosyphilis by spinal fluid examination and cardiovascular syphilis by x-ray. S.T.S. titers are usually low. A careful history concerning previous S.T.S., former hospitalization and blood testing should be done.

TREATMENT OF LATE SYPHILIS

Treatment of late syphilis of the benign gummatous type and of late latent syphilis is the same treatment that has been outlined for early syphilis. There seems to be no need to prolong or to give greater doses of penicillin. There is some controversy as to the necessity of intramuscular injections of bismuth as a precaution against the occurrence of the Jarish-Hexheimer reaction in case of undiscovered foci of active syphilitic infection in certain areas such as the aortic wall, or openings of coronary arteries in large cerebral vessels, or around the larynx. These reactions are rare in cases of late syphilis. Many physicians start therapy with penicillin with no ill effects.

If symptomatic neurosyphilis is diagnosed, at least 1,200,000 U of PAM should be given in injections of four to five day intervals for four to six doses, to a total of 6,000,000 U. This probably is adequate therapy.

Cardiovascular Syphilis.—This can be classified as: (1) simple aortitis, (2) aortitis with ostial stenosis, (3) aneurysm, and (4) aortic insufficiency.

Aortitis is best diagnosed by fluoroscopy. A widened aortic shadow especially of the ascending aorta suggests syphilitic aortitis if the patient is a previous syphilitic but it does not insure the diagnosis.

Aneurysm produces physical signs but x-ray will best confirm such diagnosis. Aortic insufficiency can be diagnosed by the presence of a diastolic murmur at the base of the heart, high pulse pressure and water hammer pulse.

E. Thomas states that a negative S.T.S. is seldom seen in untreated cardiovascular syphilis. I have found this to be true in patients that I have observed.

TREATMENT OF CARDIOVASCULAR SYPHILIS

Specific statements here are difficult because of the varied character of the lesions and the uncertain prognosis in individual cases. General measures are of great importance. If the patient's occupation is physically strenuous, he should be advised to change it. Antisyphilitic treatment aims at healing active lesions and toward preventing progression of the process, but damage to the vessel walls and heart is permanent. Scarring produces complications at times. Here again some physicians advocate a cautious beginning of therapy with injections of soluble bismuth. Daily injections of procaine penicillin may be given for 10 to 12 days with total dosage of 6 to 10 million units. Some writers feel that treatment may be given with 1,200,000 U of PAM without fear of Herxheimer reactions.

Diagnosis of Neurosyphilis.—Neurosyphilis cannot be diagnosed accurately without examination of the spinal fluid. Symptomatic tabes dorsalis and general paresis also deserve spinal fluid examination which is the best index of the activity of a syphilitic involvement of the central nervous system.

A clinician doing such a test usually orders a cell count, total protein, one of the tests for syphilis which may be done on spinal fluid and, perhaps, a colloidal gold test (Lange Test). The cell count and total protein test are the important "must" tests. Activity within the central nervous system may be gauged by an increase in the cell count (more than four cells per mm. of fluid) and by increased total protein. The top value for protein will depend on the laboratory test used. Colloidal gold tests are oftentimes done poorly, or the gold solution is too sensitive and the test thus renders little information as to syphilitic activity. The colloidal tests are useful in determining parenchymatous damage. Colloidal gold tests are not easily interpreted, however. In order to evaluate the effects of therapy, spinal fluid examinations should be done at six months intervals. Successful therapy should reduce all tests to near normal within the first six months and they should remain at normal levels. The total protein also should evidence decline in this period but it may take 12 to 18 months for the total protein to fall to normal. Relapses can be diagnosed by an increase of cells, of total protein and an increase in the titer of specific tests for syphilis of the spinal fluid. It is important to recognize that no existing antisyphilitic therapy can restore tissues which have been irreversibly and irreparably damaged.

TREATMENT OF NEUROSYPHILIS

Penicillin is the treatment of choice. Fever therapy is no longer used except on rare occasions. Procaine penicillin (PAM), 600,000 units, should be administered daily for 20 days to a total of 20,000,000 units. Additional courses are seldom required except in some cases of general paresis in which there is no response to the therapy as demonstrated by persistence of abnormal cell counts and total protein values. Always in evaluating therapeutic results, clinical results are less helpful than reexaminations of the spinal fluid.

Congenital Syphilis.—Penicillin administered to syphilitic pregnant women is most effective in the prevention of congenital syphilis even though it be given late in pregnancy. There is no hazard in the administration of penicillin to a pregnant woman unless she be penicillin sensitive. Congenital syphilis could be eradicated if it were possible to do prenatal S.T.S. as a part of prenatal care in *all* instances, and treat all women thus found to be sero positive. If there is adequate therapy of the pregnant woman in the first pregnancy, there is little risk of transmission of infection in subsequent pregnancies. It is a common practice to retreat with each pregnancy, however, for the feeling of safety such therapy engenders. Treatment of established congenital syphilis is by penicillin given preferably in the first two years of life. Penicillin dosage is based on body weight. About 200,000 U of crystallin penicillin per pound of body weight should be given. Thus, if the infant weight is seven pounds, the total dosage would be 1,400,000 units. If the infant is hospitalized, 70 injections of 20,000 units may be given at four hour intervals. If procaine penicillin PAM is given, 150,000 units would be administered daily for 10 days. With larger children, the same dosage of penicillin based on body weight of the child remains valid.

PENICILLIN REACTIONS

Reactions to penicillin are fortunately few in comparison to the tremendous amount of penicillin which is administered. Inevitably sensitization will occur in some instances. To avoid reactions, it is essential if possible to elicit from the patient the knowledge of whether he has had penicillin before and whether it produced some reaction. Some patients, regardless, are quite unaware of their sensitization. Reactions may be immediate or delayed. Immediate reactions take the form of anaphylaxis; sometimes of the acute type which may be fatal. Delayed reactions may occur in several hours to several weeks after the administration of the penicillin. The reaction may resemble serum sickness. Other manifestations are pruritis, various types of rashes, fever, arthralgias, joint effusions and albuminuria. Exfoliative dermatitis and polyarteritis nodosa have been described by some authors. If there is a real history of sensitivity, the drug should not be given unless there is absolute necessity.

Acute anaphalatic reactions can best be treated with adrenalin, aminophylin and supportive therapy. The patient's airway should be unobstructed and oxygen may be necessary if there is respiratory distress. Delayed reactions may be treated with antihistamines or with steroids. Minno and Davis[9] in 1957, and Zimmerman in 1957-1958[10] claimed good results in the treatment of delayed reactions with the use of intramuscular injections of 800,000 to 1,000,000 units of penicillinase which may be repeated at intervals of three to four days.

SUBSTITUTES FOR PENICILLIN IN PENICILLIN SENSITIVE CASES

When patients give histories of reactions to penicillin and when the clinician feels that penicillin cannot be used, syphilis should be treated with other antibiotics rather than with bismuth or arsenicals.

Turner and Schaeffer in 1954[11] investigated the anti-Treponemal effect of various antibiotics in rabbits infected with virulent strain of Treponema Pallidum. They list the following, in their order of effectiveness: (1) Penicillin, (2) Carbomycin (magnemycin) and erethromycin (ilotycin), (3) Oxytetracyclin (terramycin) and chlortetracyclin (aureomycin), and (4) Chloramphenicol and streptomycin.

The recommended dosage is 0.5 gm. four times daily for eight to 10 days in early and latent cases and for 12 to 15 days in late symptomatic cases.

THE TREATED PATIENT

After the patient has been treated, it is of importance that he be observed. Primary and secondary S.T.S. titers fall rather rapidly. It is not unusual to observe seronegativity within a year. Twenty to 30 per cent of secondary syphilitic patients adequately treated may still retain low titered positive S.T.S. for more than a year. Retreatment is not advocated unless the S.T.S. shows marked increases after falling for a space of time. Such serologic relapses may occur without clinical symptoms and retreatment is the rule. Patients who have been adequately treated for late syphilis may continue a slight seropositivity for many years but in no case should retreatment be done solely on the basis of retained positivity. Marked increases in seropositivity or clinical symptoms must be present before retreatment is advocated.

Neurosyphilis therapy is best evaluated by spinal fluid reexamination at periods of six months for the first year and at longer periods thereafter.

CONCLUSIONS

The discovery and easy availability of antibiotic drugs has made the treatment of all venereal diseases much safer and more satisfactory. Pain and suffering due to therapy now outmoded has been eliminated. The simplicity of treatment makes for therapy easily administerable by all physicians.

However, the fundamental problems of accurate diagnosis and contact tracing are unchanged. The psychologic stress which the diseases provoke and the danger to, and disruption of, family life, which may result, is still a primary concern of the dedicated practitioner.

New drugs alone will not control these diseases as the recent rises in the incidence of venereal disease demonstrate. It is probable that the ultimate control of the problem lies in part outside of the medical profession and depends somehow upon the control of promiscuity and a better working relationship between private physicians and the field of public health in order that there may be better discovery and elimination of infectious reservoirs, since the mode of transmission cannot be controlled.

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RALPH PERRY, M.D., ***Kansas City***

President's Message

A Special Article

Dr. Perry served as President-Elect in 1958-1959 and was installed as President of the Missouri State Medical Association at the Kansas City Session in 1959. He served as President until the installation of Dr. R. O. Muether, St. Louis, as President, at the St. Louis Session, March 16, 1960.

The President's Message was delivered to the House of Delegates at its opening session of the 102nd Annual Session, on March 13, 1960, in St. Louis.

Mr. Speaker, Members of the House of Delegates: It is hard to believe that nearly a year has gone by since I addressed this House at the start of my term as President of the Missouri State Medical Association. The fact is there, however—and I, for one, have a whole new understanding that the problem of aging is something a great deal more than one more policy issue on MSMA's agenda. The quick passage of this last year—and of my term of office—has brought the fact of getting older home to me as a very personal matter indeed, though I hasten to assure you that I am not thinking of myself as a candidate for benefits under the Forand Bill!

So much to do; so little time to do it in—this melancholy reflection often strikes us all, but never, I think, quite so forcibly as when we come to the end of a long period of active work such as I am now completing in my official service with MSMA.

These years have meant much to me—not only in terms of the importance of the work on behalf of our profession and the people of our state, but also in terms of the close associations and friendships I have formed with so many of you—with my fellow officers and councilors, with members of local societies throughout the state and with the men and women of our able staff.

As your retiring President, I can confidently report to you that you have in MSMA an organization to be proud of—a vigorously, healthy association, soundly operated and altogether competent to speak for the best interests of patients and physicians in Missouri. Its continued effectiveness depends in the long run on each of us—on every Missouri doctor. I shall have another word to say on this at the conclusion of these remarks.

A moment ago I spoke of the melancholy all of us must sometimes feel when we consider the number and the seriousness of the problems that confront us and the difficulties, set-backs and delays we seem always to run up against in our efforts to find the right solutions. The last year of MSMA activity furnishes an excellent case in point.

We did take a forward step—and a significant one. It was not, by any means, all we had hoped for, but it was a clear and definite step ahead in the interest of the people of Missouri. Passage of single-license legislation during the year gives us new assurance for the first time that every person to be licensed as a physician and surgeon in our state will have passed an adequate test of his competence. This is a great thing, and I compliment the individual people in MSMA—officers, Council, committees, staff and, above all, the members of this House, who defined our policy and stood behind it.

The past year, then, chalked up for us one significant, concrete accomplishment. But how long that achievement took!

First, there were the months and months of study and discussion leading up to the definition of our policy. There followed five or six years of conferring with other groups, drafting legislation, supporting it, losing in the General Assembly, drafting a compromise measure, again compromising to meet further objections of others—and then, finally, success in the last session of the legislature.

It seemed to us—during all this time of effort—that the processes of democracy were very slow and long-drawn-out. It is today an ironic contrast to observe how fast and headlong these same processes can threaten to be in a national election year when, as at the moment, ill-considered, vote-catching welfare proposals multiply in the Congress.

There is, indeed, a bitter contrast between the slow, deliberate and difficult development of voluntary programs to meet evolving social needs—and the easy clamor of those who call for immediate meat-axe legislation to impose on American medicine a system of compulsion.

This clamor at the present moment has reached a dangerous pitch. It appears, as I said the other night in an address to the local medical society at Mount Vernon, that 1960 may well be the year for decision as to whether the physicians of this nation are to continue to be members of a free profession responsible directly to their patients—as members of other professions are rightly responsible to their clients—or whether they are to be singled out and made agents of a Federal bureaucracy that will, in effect, pay them for their services and determine for whom and under what circumstances these services are to be provided.

I do not wish to appear to you, as I speak today, as an extreme conservative. I am a Republican. I work at it. And I'm proud of it. But I do not believe we can realistically expect to live in the rapid currents of Twentieth Century society without adjusting ourselves to change. Nor do I believe we should try to do so.

I do, however, most emphatically believe that it is up to every one of us to try his best to see that changes, as they come about, do not upset fundamental values in our society—and equally fundamental values in our profession and in its responsibility to patients.

Let me try to be specific. This House supported Medicare. That is a federally financed program. I think we did the right thing to support it. Why? It is a method to give to the dependents of service men the kind of care I think the government ought to see they get—and organized medicine ought to see they get. They, after all, are called to meet an urgent national need. We, as doctors, should be willing to respond to an equivalent call.

Again, this House did not oppose the principle of the federal vendor program to make available matching funds for the health care of indigent people on public assistance rolls. We did, indeed, say that in Missouri the medical profession did not wish to share in the receipt of these funds. We said we would hold to our obligation to care for the aged and the indigent on a doctor-to-patient basis just as the tradition of our profession has always required, without regard to money. At the same time, we did not oppose the use of public money for the necessary hospital and nursing home care of people on relief. I think our position was correct.

Both of these developments represented changes from old ways. Both were the kind of changes doctors of principle and citizens of principle could accept. But now—now we are confronted with a threat of change that is radically different from the programs for military dependents and indigent pensioners I have just referred to.

This is the threat that election-year pressures may result in adoption of legislation of the Forand Bill type in the present session of Congress. Such legislation would bring some 15 to 16 million citizens into a compulsory, tax-paid system of federal medical care, without any regard for individual economic status or need. It would, flatly, be socialized medicine for all persons eligible to receive Social Security benefits. After such a long first step to bring practically all our people over age 65 into a compulsory federal program of hospitalization, surgical care and nursing home care, it is apparent there could be no turning back. The federal program would inevitably expand to cover more and more of the population and to provide more and more complete service.

The danger of this today is greater, I think, than it has ever been before. It is not just the Forand Bill that concerns us. Senator Kennedy has introduced a similar measure in the Senate, and a recent newspaper story from Washington states that tomorrow, Monday, March 14, is the deadline by which the Secretary of Health, Education and Welfare is to decide whether he will recommend introduction of an administration measure seeking the same end. I am aware that officials of the A.M.A. have been conferring with Secretary Flemming and his staff, and I devoutly hope they have found ground on which they can stand together.

The fact is, however, that the weeks immediately ahead are going to be critical weeks for American medicine. I know that this House will do its part to lead our Missouri efforts to oppose such federal legislation, and I am confident every individual doctor in the state will do his part to help.

I have already noted that the position of our Association has not been one of blank opposition to changes to meet evolving social needs. I have indicated how, in the area of legislation, we have either taken the lead, or constructively given support, in efforts to achieve needed change.

The legislative side of the problem is, however, in my opinion, the least important side. If our American tradition is truly a tradition of cooperative effort among citizens through individual and group action at the community level

—then we should think of legislation only in areas where the need for it is demonstrated beyond reasonable doubt. Our main reliance should be on the group initiative of local citizens.

As you members of the House read the reports of the officers, Council and committees of this Association, as you study the materials in your delegates' handbooks, you will recognize again how active MSMA has been in giving constructive leadership to voluntary efforts to extend the full benefits of modern medical care to every area and to every person in Missouri. I shall not here attempt to review even parts of the program—placement of physicians in rural areas, extension of voluntary Blue-plan prepayment coverage to all regardless of age, participation in plans for the coming White House Conference on Aging, preceptorship training for senior medical students at the state university and all the rest.

There are just two specific points I should like to recommend for your earnest study and attention. The first relates to the medical school of the University of Missouri. As you all remember, our Association was one of the major forces back of the reestablishment of the full four-year curriculum in medicine. I am happy to report that we are keeping in close touch with the affairs and problems of the school and have established the most cordial working relationship with the new dean, Dr. Vernon Wilson.

Dean Wilson reports a real need for a greatly expanded student loan fund. I believe Missouri doctors could make no greater contribution to the future of medical care in the state than by establishing programs through their local societies to provide loans for able medical students at the university.

The broader problem of the medical school is, of course, operating funds. I am told the medical center is seriously in need of increased income, both in the form of greater appropriations by the legislature and increased patient revenue. It should be our concern to help in both these areas.

The second matter to which I invite your most thoughtful attention is the report of the Committee on Aging and the whole question of what we as a profession can do to take the lead in solving whatever problems may be acute in this regard on the basis of constructive programs that will preserve intact the direct relationship between patient and doctor that is central to our voluntary system of medicine.

Your president-elect, Dr. Muether, who will follow me on the platform, will present to you the elements of another important problem which has been under study through the year by a special committee of which he is chairman. This is the problem of the nature and extent of various types of institutional practice of medicine in our state. I shall not comment except to say that the forces at work to change the aspect and the character of medical practice do not all stem from government. There are trends and tendencies in hospitals, in labor and other consumer groups—indeed, within our profession itself—that require analysis and careful thought today lest the position of the individual medical practitioner be altered beyond recognizing to the ultimate loss equally, as I see it, of the profession and the patient.

I shall now conclude with a final word of thanks to all of you with whom I have worked in the affairs of MSMA for so many years. I thank each of you—and, particularly Tom O'Brien and his staff—for unfailing help and cooperation. To your new president, Ray Muether, I offer again my congratulations and the wish that his presidential year may be one of constructive achievement.

And to every one of you I say again—what I have repeatedly stressed in talks during the last year. In our complex and fluid society today, it is not enough to be a doctor—not enough, even, to be a good doctor. If the voice of medicine is to be an effective influence on the fast moving course of events, each of us must be active in the affairs of his community, his state and nation. This means civically active. It means politically active. We have achieved in this country an enviable position of respect and regard as physicians. If we are to preserve that position, we shall now have to be something more. We shall have to be physician-citizens.

RAYMOND O. MUETHER, M.D., ***St. Louis***

Recommendations of the President-Elect

A Special Article

Mr. Speaker, Members of the House of Delegates: After reading—and now hearing—the remarks made by our President, Ralph Perry, I am more aware than ever that he's going to be a hard man to follow. A hard man to follow at the speaker's rostrum, for sure. He's said about all that needs saying.

What I'm up against now—as we begin another Association year—is to try once more to come to grips with the jobs that seem to need doing.

As Ralph has indicated, the times we live in—the forces that seem to move faster every year—forces of governmental change and social evolution—these times and forces are going to keep us working hard not just for the year ahead, but for many years to come. Perhaps forever.

My hope, as I speak to you, is that I shall prove equal to the job that my predecessor has done so well. He has been faithful. He has worked hard. He has brought prudence, on the one hand, and imagination, on the other, to the work our Association has to do. His presidential year has been an outstanding success, and all of us owe him more than I can express in a simple thank-you here today.

Now, I want to say frankly—at the very start of my term as your President—that I have no elusions that my term of office will end in a blaze of victorious achievement for our Association on its many troubled fronts. If I were younger—if I had not the experience and the scars of battle—if I did not know how complex and difficult our problems are—I should be able, perhaps, to speak to you with more vigor and more dramatic effect. I might feel able to blueprint a specific and detailed program. I might even sound a ringing call to action.

I shall not do any of these things. I believe we have a long, hard way to go. The most I can say is that I shall do my best to measure up to the responsibility you have given me and do everything I can to insure that, by the end of my term next year, our Association can honestly assert that it has again done its full part to defend and foster the values we believe in.

I want, further, to ask each member of this House and each individual member of the Association, to do this personal part of the important work of the coming year. Remember that we doctors are not necessarily immune to false charms and appeal of "security" that increasingly seem to be affecting all walks of American life. There is a disposition to leave politics to politicians, welfare programs to social workers or labor professionals—in short, a disposition on the part of more and more citizens to feel that their personal influence, their personal effort and example have little effect on the course of events and a great desire to avoid fighting for what they believe is right.

Dr. Muether was elected President-Elect of the Missouri State Medical Association at the Kansas City Session, April 8, 1959. He was installed as President at the St. Louis session, March 16, 1960.

The Recommendations of the President-Elect were presented to the House of Delegates at its opening session of the 102nd Annual Session, March 13, 1960.

The result is, in medicine, that too many of us believe we can leave it to the M.S.M.A., the A.M.A., a specialty society or some other organization to stand up and defend the principles which we should be carefully guarding as individual citizen—doctors.

It is a fact that these principles have living force only when they are exemplified in the daily practice of the individual physicians. It is a sad trend—but one we must realistically recognize—that sees doctors themselves giving in to the temptations of security and voluntarily cooperating in institutional programs of many kinds that tend more or less directly to change the character of individual medical practice, which most of us profess to believe in as the foundation of our free profession.

The dangers we face are not all external dangers—not simply the threat of outside social forces and government compulsion. There is a greater interior danger due perhaps to an uncertainty in our own minds as to our purposes—which makes us less vigorous in standing up for the established moral and ethical traditions of medicine than we should be.

One of the things we need at this time—and the House of Delegates has instructed M.S.M.A. to try to provide it—is a clear new set of definitions to guide us in determining what kinds of developments in institutional practice may be desirable and in the best interest of patients and what kinds are to be resisted as detrimental to the patient and incompatible with the integrity of the medical profession. A report of the Special Committee on Corporate Practice, on which I served last year as chairman, will come before you at this session. I shall not dwell on it here, except to say that I hope it will have your earnest and thoughtful consideration and that the committee's proposal may prove to be a valuable starting point for an effective program, which will give new and proper direction to what seems, at least to me, to be a dangerous draft away from the established and traditional pattern of individual medical practice.

In the last analysis, however, this matter will not be resolved by any association program, as such, but rather by the cumulative decisions of all of us as individuals, whether we shall accept the security of salaried employment or panel-plan employment, or some other type of third-party participation in our relationships with patients.

The basic questions are: First, what is going to be the prevailing pattern of payment for medical care; second, what kind of professional man is the doctor going to be and, third, what kind of professional attention is the patient going to get? It is by no means clear what the answers to these questions are going to be in another 15 or 20 years. It is up to us—not only as an Association, but as individuals—to see that the answers turn out to be right ones—right for the progress of scientific medicine, right for the care of the patient. I commend the report of the Special Committee on Corporate Practice to your earnest attention.

There is a related matter that will have great importance during the year ahead, and that is the work of the Missouri Task Force that is preparing for the 1961 White House Conference on Aging. The recommendations of this conference will have a great influence on the legislation on this subject for the future. If we succeed—as I trust we shall—in resisting passage of the Forand Bill or a similar measure in the current session of the Congress, the next major opportunity the voice of medicine will have to speak constructively will be this national conference.

I am sure I do not need to tell you that there are welfare, labor and other interests in our Missouri Task Force that are urging courses diametrically opposed to the voluntary ones we advocate. In the months ahead a number of conferences will be held throughout the state. These conferences will, in large measure, influence the recommendations that Missouri will send into the national conference. At each of these preliminary conferences in Missouri we wish M.S.M.A. to be effectively represented. I ask each of you to hold yourself in readiness to accept a call to attend—and vigorously to take part in—any such conference that may be scheduled in your area.

The mind of the country is now being made up as to what kind of an approach we are to take for the adequate care of the increasing number of older people. Enough has been said on the Forand Bill to make it unnecessary to point out that the wrong kind of answer nationally could mean the end of our voluntary system of medical practice. I hope the doctors of Missouri will see to it that our state influence in the White House conference is exerted vigorously against federal compulsion in medical care.

We have, of course, a corresponding responsibility to do our part in finding acceptable solutions to all the problems affecting the aged on a voluntary basis. I call your particular attention to the report of the Committee on Aging that will be considered at this session of the House.

In this connection, I think we can be proud that the Blue Shield plan we sponsored is today sound and thriving with a record membership. Benefits of the plan are available to all on an individual, non-group basis without regard to age. I have recently been honored by being chosen president of Missouri Medical Service, and I report to you with pleasure that the recently announced major-medical program, offered jointly with Blue Cross, has been well received. All of us are, I know, concerned that Blue Shield should continue to grow in its service to the public and become a continuously more complete and successful voluntary alternative to a federal program of compulsory health insurance.

There is one specific subject I wish to advocate for inclusion in our M.S.M.A. program. I believe it has become altogether clear that Missouri needs an adequate medical examiners system to supplant or augment the coroner system. I urge

(Continued on page 603)

A.M.A. 109th Annual Meeting

The 109th annual meeting of the American Medical Association will be a forum presented by some of the nation's top scientific brains.

Approximately 2,000 physicians, all outstanding in their field, will participate in presenting the scientific program of the meeting to be held in Miami Beach, June 13-17.

There will be two general scientific meetings in the Grand Ballroom of the Fontainebleau Hotel, and other lectures, symposiums and panel discussions in the Fontainebleau, Eden Roc Hotel, and in the new, air-conditioned Miami Beach Exhibition Hall. Sessions of dermatology, being held jointly with the Society for Investigative Dermatology, will be in the di Lido Hotel.

The opening general scientific meeting, Monday afternoon, June 13, will begin with the Joseph Goldberger Lecture on Clinical Nutrition. Dr. Carl A. Lincke, chairman of the A.M.A. Council on Scientific Assembly, will preside at this meeting.

The lecture will be followed by a symposium on nutrition, including an address by Grace A. Goldsmith, professor of medicine, Tulane University School of Medicine, New Orleans, on "Highlights on the Cholesterol—Fats, Diets and the Atherosclerosis Problem."

The second general meeting will be a symposium on "Evaluation and Preparation of Patients for Anesthesia and Surgery," Tuesday morning, June 14, to which the sections on Anesthesiology, Diseases of the Chest, General Practice, Internal Medicine, Pediatrics, Pathology and Physiology, and Surgery have contributed. Participating will be Meyer Saklad, Providence, R. I.; Thomas Rardin, Columbus, Ohio; Eugene Turrell, Milwaukee, Wis.; John S. LaDue, New York City; Arlie R. Mansberger, Jr., Baltimore; George Meneeley, Nashville, Tenn.; Robert M. Smith, Boston and C. Rollins Hanlon, St. Louis, Mo.

Section Programs

What's new in surgery will be explored during a symposium and panel discussion on Wednesday morning. The program was developed from suggestions obtained from a survey of the heads of departments of surgery in the nation's medical schools.

The symposium will be on "Recent Advances in Treatment of the Cancer Patient" with an introduction to the problem including methods of decreasing spread of cancer cells during operations being presented by Warren H. Cole, Chicago. Dr. Cole also will serve as moderator of the panel on "Current Status of the Treatment of Advanced Cancer of the Thyroid and Breast."

Arthur M. Master, New York City, will speak on "Effort, Occupation (including physicians) in Coronary Occlusion" during a symposium on Medical Chest Emergencies, and John F. Briggs, St. Paul, Minn., will discuss "Pulmonary Embolism."

John H. Moyer, Philadelphia, will moderate a symposium on "Edema: Its Physiology and Use of Newer Diuretics in Its Treatment." Irving S. Wright, New York, will moderate a symposium on "Pathogenesis and Treatment of Thrombo-Embolic Phenomena." Daniel C. Moore, Seattle, Wash., will take part in a session on "Newer Trends in Diagnosis and Treatment" discussing "Oxygen: The Rational Therapy for Systemic Toxic Reactions From Local Anesthetic Drugs."

There will be panel discussions on "Tumors of the Trachea and Bronchial Tree," with Paul H. Holinger, Chicago, moderator, and one on "Disseminated Diseases of the Chest," with Harold O. Peterson, Minneapolis, moderator.

Highlights of other section meetings include:

Nervous and Mental Diseases: E. S. Gurdjian,

(Continued on page 634)

Recommendations of the President-Elect—Continued

that we seek legislation in the next session of the General Assembly to attempt to bring about this much needed reform.

I should like to conclude these brief remarks by saying again that I do not believe we are going to find easy or quick solutions to some of the fundamental problems that confront us. I want, however, to affirm my absolute confidence that the doctors of Missouri are going to measure up to the hard and difficult challenges ahead and that we shall succeed in preserving and in fostering the essential values of our honored profession in the true long-range interest of the public.

I am honored at the opportunity to serve as your President. I shall try to help make the year ahead one we can be proud of.

R. O. Muether, M.D.

President's Message

Regardless of the outcome of the Forand bill, individual doctors, component medical societies, the Association itself and the Woman's Auxiliary probably have put up the most united front they have ever shown. It is vital to the medical profession and the public that legislation which would ultimately lead to socialized medicine, as happened in Great Britain, not be passed.

It must be recognized that the medical profession can stand together and did so better than ever before. Resolutions were sent to the legislators by county medical societies and individual doctors wrote letters and sent telegrams to the representatives and senators.

The efforts of the Woman's Auxiliary, at the annual session, to encourage, and simplify letter writing to congressmen to the minimum amount of effort, was an outstanding piece of work for which they cannot receive too much credit.

We in medicine can be pleased by the backing we got when we stood together. Not from all sources, of course, but it is estimated that 90 per cent of the editorial material which appeared has been against the Forand bill.

It is an ill wind that blows no good, and out of the fight against the Forand bill has come a concerted effort on the part of the medical profession.

There has been no complacency in the attitude of the medical profession and there must be none now. While most editorials are against the bill and many letters are being received by the opponents of the bill, there still are many editorials and letters going to the proponents.

This fight which I devoutly believe is in the interest of all the people will continue for a long time and we cannot let down or allow ourselves to become satisfied with past performances.

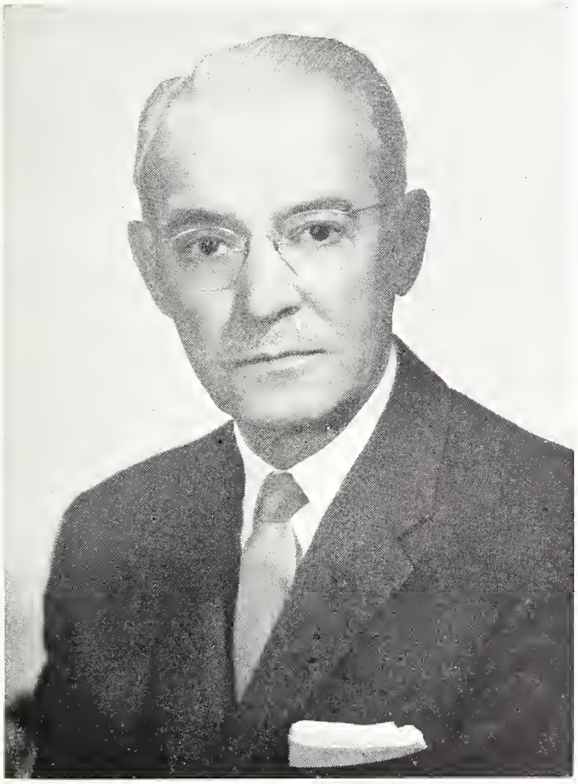
R. O. Muether M.D.

EDITORIALS

J. H. SUMMERS NAMED PRESIDENT-ELECT

The House of Delegates of the 102nd Annual Session of the Missouri State Medical Association elected Jacob H. Summers, M.D., Lebanon, as President-Elect. Dr. Summers will serve as President-Elect during the coming year and will be installed as President at the meeting in Kansas City, March 18, 19, 20 and 21, 1961.

Dr. Summers became a member of the Laclede County Medical Society, now a part of the Mid-Missouri County Medical Society, and the Missouri State Medical Association in 1932 following his internship. He served his county medical society as president in 1940, 1941 and 1942, and as secretary in 1951. He was a Vice President of the Missouri State Medical Association in 1950.



J. H. Summers, M.D.

In 1952 the delegates from the 9th Councilor District elected him Councilor from their district and he served on the Council until his election as President-Elect of the Association. He was chosen Chairman of the Council in 1958 and served in that capacity until his resignation upon his election as President-Elect.

Dr. Summers was born in Conway, Missouri, on January 11, 1901. He attended Drury College in Springfield and obtained his B.S. degree from that school. He received his medical degree from Washington University School of Medicine, St. Louis, in 1931. He served as extern during his senior year and as intern at Lutheran Hospital, St. Louis, in 1931 and 1932. He is married to the former Peggy Palmer of Lebanon.

From 1942 to 1945 Dr. Summers served in the European Theatre Operation and was a Captain in the 9th Air Force.

Besides membership in county and state medical organizations and the American Medical Association, he is a member of the Missouri Academy of General Practice, of the Southern Medical Association and the Frisco Railway Medical Association.

He is a staff member of the Louise G. Wallace Memorial Hospital at Lebanon, and an associate staff member of Burge and Springfield Baptist hospitals in Springfield.

In nonmedical activities, Dr. Summers is a past president of the Louise G. Wallace Memorial Hospital board, of the Lebanon Rotary Club and the Lebanon Chamber of Commerce. He is at present president of the Laclede County Tuberculosis Society. He is a member of the Veterans of Foreign Wars and of the American Legion and is a board member of the Regional Heart Association.

Other officers elected at the 102nd Annual Session are Drs. Claude J. Hunt, Kansas City; Thomas S. Fleming, Moberly, and Robert B. Bassett, St. Louis, Vice Presidents; John I. Matthews, Jefferson City, Secretary; Charles R. Doyle, St. Louis, Treasurer; Donald M. Dowell, Chillicothe, Chairman of the Council, and Ben M. Bull, Ironton, Vice Chairman of the Council. Drs. Durward G. Hall, Springfield, and H. E. Petersen, St. Joseph, were reelected Delegates to the American Medical Association, and Drs. Guy N. Magness, University City, and J. Loren Washburn, Versailles, alternates. Dr. Oscar P. Hampton, University City, was reelected Speaker of the House of Delegates and Dr. William C. Mixson, Kansas City, was reelected Vice Speaker of the House.

At the St. Louis 1960 Session, the gavel was presented to R. O. Muether, M.D., St. Louis, at the Banquet in Honor of Past Presidents, and he was constitutionally installed at the concluding Session of the House of Delegates and will serve as President until the 1961 Annual Session.

Ramblings of the Field Secretary

A fourth symposium entitled, "Dollars and Sense" was presented by the St. Louis Academy of General Practice at the University of Missouri Medical Center, Sunday, March 6. Cosponsors of this affair were the Missouri Academy of General Practice and Mead Johnson Company. All medical students and their wives (if any) were invited to attend. The main objective of this symposium was to interest these medical students in "setting their sights" for general practice. The program was therefore developed and presented with this in mind.

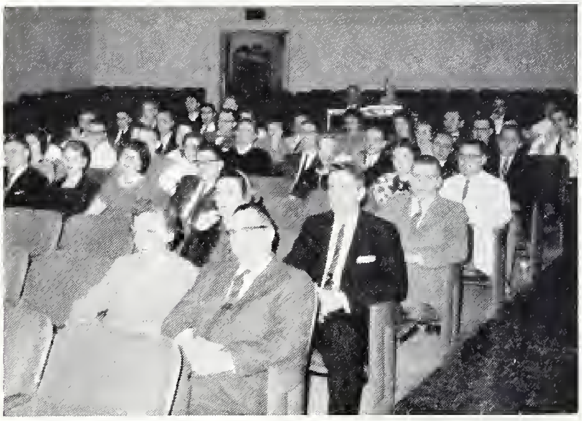
Dr. W. A. Mullarky, Chairman of the St. Louis Academy's Medical Economics Committee, presided. He opened the three hour session at 2:00 p.m. with some pertinent remarks on what it is like to be a doctor, particularly one who practices general medicine. Others on the program included: Robert Keller, M.D., Wentzville, who spoke on his experiences as a general practitioner in city practice, rural and, now, suburban practice; Lois Wyatt, M.D., Kirkwood, presented a woman physician's viewpoint of general practice; Mr. Paul Koenig, St. Louis attorney, discussed some of the legal aspects of medical practice; Mr. Ted Spyra of Mead Johnson Company, presented two strip films, with appropriate explanation entitled, "Where Shall I Practice" and "Financing the New Practice." Yours truly was given opportunity to speak on "Physician Placement Services and Opportunities for Practice in Missouri."

Dr. Wyatt discussed the woman physician.

The afternoon session concluded with a short informal period of discussion and refreshments.

Coming soon are the following postgraduate meetings to which all members of the Missouri State Medical Association are invited. On May 1, "A Symposium on Modern Trends in Therapy" presented by the St. Louis Academy of General Practice in cooperation with the St. Louis University and Washington University Schools of Medicine, will be held at the Chase Hotel in St. Louis beginning at 10:00 a.m. and concluding with a reception from 5:30 to 6:30 p.m. No fee is charged and the luncheon and reception are free, compliments of Lederle Laboratories. Detailed program was published in the April issue of Missouri Medicine, page 496. It is acceptable for five hours Category I postgraduate credit for Academy members.

Dr. Keller spoke on rural practice.



All medical students and their wives were invited.

On May 11 and 12, the Fifth Annual Spring Clinical Conference at the University of Mis-

(Continued on page 636)

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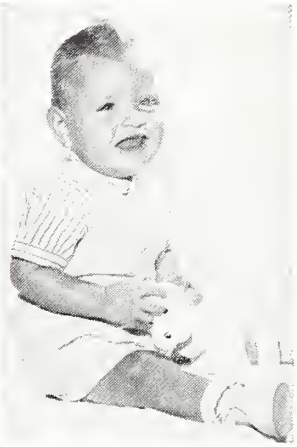
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News—Personal and Professional

The Jasper County Legal Secretaries had as speaker recently **Bart F. Wooldridge**, M.D., Joplin, who spoke on the relationship between physicians and attorney in personal injury suits.

A recent speaker before the Grandview Lions Club was **Wallace H. Graham**, M.D., Kansas City.

"Internship" was discussed by **J. S. Roden**, M.D., Columbia, before the University Medical Dames at a March meeting.

"Time and Two Women" was shown at a meeting of the Lions Club of Poplar Bluff by **Edward W. Cline**, M.D., and **Albert L. May**, M.D., both of Poplar Bluff.

General chairman of a campaign for $100,000 to purchase a permanent home for the Boys Club of St. Charles is **Russell J. Crider**, M.D., St. Charles.

Cancer detection and cancer education was discussed by **Terry E. Lilly, Jr.**, M.D., Kansas City, at a Founder's Day meeting of the Parent Teachers Association in Trenton.

Recently appointed head of the urology department at St. John's Hospital, St. Louis, is **Grayson Carroll**, M.D., St. Louis. **William L. Tomlinson**, M.D., St. Louis, was appointed to direct the surgery department of the hospital.

The Bertner Foundation Award for cancer research was presented to **E. V. Cowdry**, M.D., St. Louis, at a meeting in February.

"The History of Human Heart Surgery" was presented by **Kenneth K. Keown**, M.D., Columbia, at a meeting in the Medical Sciences Building, Columbia, in Feburary.

The Lincoln Parent Teachers' Association, Joplin, was addressed by **Robert E. Bruner**, M.D., Kansas City, on "Cerebral Palsy and Brain Damage."

The Missouri Bar Association was addressed at a dinner meeting during its mid-year session by **Addison M. Duval**, M.D., Jefferson City. His subject was "Legal Relationships in Missouri's New Mental Health Program."

A speaker at the Aurora Rotary Club marking the 55th anniversary of the founding of Rotary International was **Durward G. Hall**, M.D., Springfield. He was introduced by **A. J. C. McCallum**, M.D., Aurora.

Officers recently elected by the medical staff of Research Hospital, Kansas City, are **Martin J. Mueller**, M.D., president; **Ellsworth H. Trowbridge**, M.D., president-elect; **Donald A. Black**, M.D., secretary; **G. Robert Reinhardt**, M.D., treasurer, and **Hector W. Benoit**, M.D., member-at-large.

"The Real Meaning of Religion" was the subject of a talk by **Robert M. Myers**, M.D., Kansas City, at the annual Salvation Army advisory board dinner in Kansas City.

The Pettis County Society for Crippled Children and Adults reelected **D. R. Edwards**, M.D., president at a March meeting. **C. Gordon Stauffacher**, M.D., Sedalia, was elected first vice president.

Elected president of the medical staff of Lutheran Hospital recently was **Frank G. Zingale**, M.D., St. Louis. **A. F. Plag**, M.D., was elected vice president, and **C. E. Stindel**, M.D., secretary-treasurer.

The Laclede County unit of the American Cancer Society had as speaker at a meeting on March 17 in Lebanon **Albert E. Upsher**, M.D., Kansas City.

"The Other City," a film, was shown at a meeting in March of the Joplin chapter of the Missouri Association of Licensed Practical Nurses. A panel discussion was presented following the film by Drs. **Bart F. Wooldridge, M. F. Hall** and **Albert E. Upsher**.

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New officers of the medical staff of St. Joseph's Hospital, Kansas City, are **W. W. Gist**, M.D., president; **Paul R. Wright**, M.D., president-elect; **Daniel J. Cuteliff**, M.D., secretary, and **Donald K. Piper**, M.D., treasurer.

The Community Blood Bank of the Kansas City Area has as president **Hilliard Cohen**, M.D., Kansas City.

NEW MEMBERS

Edward J. Budil, M.D., 23 Faculty Lane, St. Louis, has become a member of the St. Louis Medical Society. Dr. Budil is a native of New Jersey, received his preliminary education in Connecticut, and his M.D. degree from Harvard Medical School, Boston, in 1954. He interned at Barnes Hospital, St. Louis, and served a residency at Barnes also.

John F. Clisham, M.D., 1316 Dillon Drive, St. Louis, became a member of the St. Louis Medical Society on March 8. Dr. Clisham is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University, St. Louis, in 1955. He interned at City Hospital, St. Louis.

Amos L. Coffee, M.D., Willow Springs, became a member of the South Central Medical Society on February 24. Dr. Coffee is a native of Kansas, received his preliminary education at Atlantic Union College, and his M.D. degree from the College of Medical Evangelists, Los Angeles, in 1956.

Roy J. Doty, M.D., 706 East Seventh St., Rolla, became a member of the Mid-Missouri Medical Society in January 1960. Dr. Doty is a native of Oklahoma, received his preliminary education in Oklahoma, and his M.D. degree from Oklahoma University in 1958.

James A. Drennan, M.D., 4929 McPherson Avenue, St. Louis, became a member of the St. Louis Medical Society on March 8. Dr. Drennan is a native of Illinois, received his preliminary education in Illinois, and his M.D. degree from Washington University, St. Louis, in 1957. He interned and is serving a residency at St. Luke's Hospital, St. Louis.

John F. Fitzgibbons, M.D., 2311 N. Kingshighway, St. Louis, has become a member of the St. Louis Medical Society. Dr. Fitzgibbons is a native of Iowa, received his preliminary education in Nebraska, and his M.D. degree from Creighton University School of Medicine, Omaha, in 1955. He interned at DePaul Hospital, St. Louis, and is serving a residency at DePaul as well.

Robert L. Kistner, M.D., 8625 Rosalie Avenue, St. Louis, has become a member of the St. Louis Medical Society. Dr. Kistner is a native of Missouri, received his preliminary education in St. Louis, and his M.D. degree from St. Louis University School of Medicine, St. Louis, in 1954. He interned at St. Mary's, St. Louis, and served a residency at St. Louis University Hospitals, St. Louis.

Seymour Schlansky, M.D., 1406 Purdue Ave., University City, became a member of the St. Louis Medical Society on March 16. Dr. Schlansky is a native of New York, received his preliminary education in St. Louis, and his M.D. degree from Chicago Medical School, Chicago, in 1950.

Joe R. Wall, M.D., Houston, became a member of the South Central Medical Society on February 24. Dr. Wall is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from the University of Arkansas, Fayetteville, in 1958.

Robert R. Young, M.D., Tenth and Bishop Sts., Rolla, became a member of the Mid-Missouri Medical Society in January 1960. Dr. Young is a native of Kansas, received his preliminary education in Kansas, and his M.D. degree from the University of Kansas, Lawrence, in 1953.

DEATHS

Pullen, Roscoe, M.D., Spokane, Wash., a graduate of Northwestern University Medical School, 1940; member of Boone County Medical Society; aged 55; died March 5, 1960.

Hull, Walter S., M.D., Faucett, a graduate of the University Medical College of Kansas City, 1900; member of Buchanan County Medical Society; aged 87; died March 8, 1960.

Miller, Wade Hampton, M.D., Kansas City, a graduate of the National University of Arts and Sciences, Medical Department, 1917; member of Jackson County Medical Society; aged 65; died March 13, 1960.

Reser, Thomas S., M.D., Cole Camp, a graduate of Barnes Medical College, 1907; member of Benton County Medical Society; aged 79; died March 17, 1960.

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1. A. M. A. Council on Drugs: New and Nonofficial Drugs 1959, Philadelphia, Lippincott, 1959, p. 389. 2. United States Dispensatory (Osol-Farrar), ed. 25, Philadelphia, Lippincott, 1955, p. 1412. 3. Grollman, A.: Pharmacology and Therapeutics, ed. 3, Philadelphia, Lea & Febiger, 1958, p. 208.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Buchanan County Medical Society

Mr. Howard Mink, president of the St. Louis Nu-Voice Club, addressed the March 2 meeting of the Buchanan County Medical Society following a dinner in the Oak Room of Hotel Robidoux, St. Joseph.

Mr. Mink talked on "Rehabilitation of Laryngectomies." The speaker was a laryngectomy patient and his presentation gave dramatic evidence of what can be accomplished with laryngectomies in returning to normal work and to society.

Despite blizzard conditions, 35 doctors attended the session. Dr. Thompson E. Potter, President, presided.

William B. Rost, M.D., *Secretary*

Grand River County Medical Society

In spite of adverse weather conditions "the show went on" for the Grand River Medical Society which met at the Strand Hotel in Chillicothe on Thursday night, March 10. A social hour preceded dinner and the formal program. Approximately 25 people including doctors, their wives and guests attended.

The scientific program for the evening was presented by Neill G. Berry, M.D., surgeon of Kansas City. Dr. Berry gave a fine discussion on the subject, "Abdominal Emergencies."

It was unfortunate that the weather prevented many from coming who had planned to be present to hear this particular program.

B. D. Howell, M.D., *Secretary*

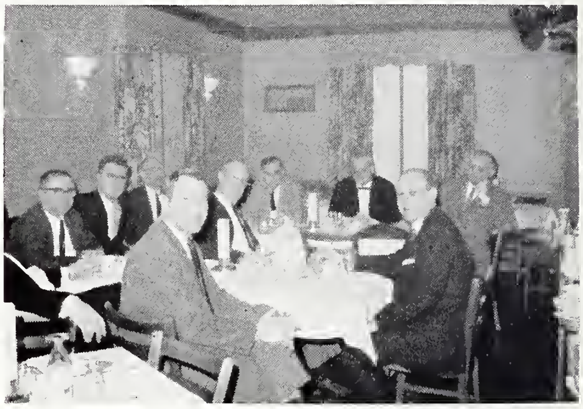
FOURTH COUNCILOR DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Lincoln-St. Charles County Medical Society

A dozen physicians attended a dinner meeting of the Lincoln-St. Charles County Medical Society at the Southern Air in Wentzville on Tuesday night, March 1.

They were privileged to hear an interesting informal discussion of "Eye Trauma" by Michael Pernoud, M.D., ophthalmologist from St. Louis. Numerous comments and questions from the audience were presented during Dr. Pernoud's presentation.


The group was small but interested.

Following the formal program, a short business session was held. The evening festivities were initiated by a social hour followed by an excellent steak dinner and then Dr. Pernoud's interesting and informative discussion.

Paul Rother, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

Henry-Johnson-Pettis-Saline County Medical Societies

A joint dinner meeting of the Henry-Johnson-Pettis-Saline and adjacent county medical societies and the doctors' wives was held Monday night, March 7, at the Pacific Cafe in Sedalia.

The evening festivities began with an enjoyable social hour at 6:30 followed by dinner and then the formal program The scientific presentation of the evening sponsored by the Missouri Academy of General Practice in cooperation with St. Louis University Medical School, was given by Donald W. Bussmann, M.D., Director, Heart Sound Laboratory, St. Louis University Medical School and Mary Davis, M.D., pediatric cardiologist at Cardinal Glennon Hospital for Children, in St. Louis. Drs. Bussmann and Davis discussed the subject, "Heart Disease in Children." They presented a number of cases that had been

(Continued on page 616)

FORCE INJURY
severe bruises
. . . swelling
. . . cleared
by fifth day[2]

VARICOSE ULCER
15 years duration
. . . resolved with
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INFLAMMATORY DERMATOSIS
rapidly spreading
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marked reversal
in 3 days . . .
returned
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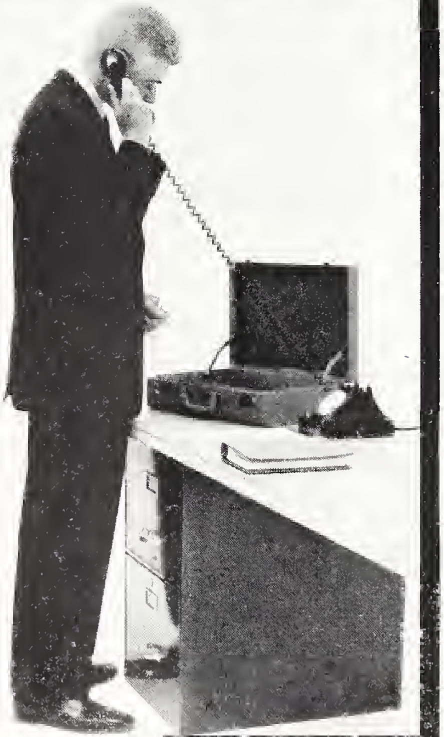

THROMBOPHLEBITIS
back on his feet
in a week after
recurrent episode[1]

REFRACTORY CELLULITIS
normal routine
resumed after 4 days
of VARIDASE[1]

seen in St. Louis University teaching hospitals and discussed these informally inviting questions and comments from the audience.

Following the close of this interesting and informative discussion, Dr. E. A. Beldon, Missouri Division of Health, Jefferson City, gave a short report on the results of an immunization level survey which had been completed in Pettis County.

Drs. Stauffacher and Proctor, alias the James boys, attended.

Doctors and wives enjoyed dinner together.

Dr. Proctor presided and Drs. Davis and Bussmann were speakers.

More than 70 people were in attendance including doctors, their wives and guests.

Considerable preparation for the Sedalia centennial celebration for the week of October 16 was in evidence when one observed the physical appearance of numerous physicians present. Such was appropriately evidenced by our presiding officer, Dr. Don Proctor, President of the Pettis County Medical Society. Others ran him a close second in exhibiting their preparation for the October occasion.

Robert W. Lemire, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Ozarks Medical Society

The Ozarks Medical Society met at LeDuc's for a smorgasbord dinner on Tuesday, March 8, following which a scientific program was presented at the staff conference room at the Missouri State Sanatorium. Twenty-four were present for dinner. There was no attendance from out of town other than the two speakers, due to inclement weather.

The program was presented by the Missouri Academy of General Practice in cooperation with the University of Missouri School of Medicine. Dr. Clement E. Brooke, associate professor of pediatrics, and Dr. Donald P. Durand, assistant professor of microbiology, discussed "Our Current Knowledge in Virology." The program was well received and provoked considerable discussion. Category I credit is given for this program.

At a short business meeting following, it was approved on motion by Dr. Glover, seconded by Dr. Brasher, that the Ozarks Medical Society hereby respectfully urge the Congress not to pass House Resolution No. 4700—the Forand Bill—or any similar legislation. There was no discussion and it passed unanimously. Copies were sent to Rep. Charles Brown, Senator Thomas Hennings, Senator Stuart Symington and Rep. Wilbur Mills.

There being no other business the meeting was adjourned to meet in Cassville on April 12.

A. J. Graves, M.D., *Secretary*

(Continued on page 618)

she calls it "nervous indigestion"

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TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler-Ripley-Wayne County Medical Society

On March 17, the Butler-Ripley-Wayne County Medical Society met at the Hickory House Restaurant, at 6:30 p.m., for a dinner meeting. There was a good turnout for this meeting.

Dr. Biggs, the delegate to the State Meeting, presented the report from that meeting with a general discussion about the resolutions and proposals which were considered.

Dr. A. C. Parker presented the professional program on "Erythroblastosis Foetalis," which was well received by all present. A telegram was sent, signed by the members of the Medical Society, to Congressman Jones and to Wilbur Mills, the Chairman of the Ways and Means Committee, putting this Medical Society on record as opposing the Forand Bill.

The meeting was adjourned at 9:00 p.m.

E. T. Hansbrough, M.D., *Secretary*

FIRST McCOMAS AWARD

The first annual prize in the Arthur Rochford McComas Medical History Essay Contest at the University of Missouri School of Medicine will be presented after a dinner beginning at 6:15 p.m. May 6 in Room 208, Memorial Student Union. The dinner will be sponsored by the School of Medicine and the Medical History Group.

Establishment of the McComas contest was announced last June. A memorial to the late Dr. Arthur Rochford McComas, an alumnus of the University and for more than 50 years a physician at Sturgeon, Mo., the contest is open to all students enrolled in the School of Medicine. Essays are to be about some subject from Missouri medical history or general medical history. The prize is $100.

Dr. Frank G. Mays, Washington, Mo., who at one time worked with Dr. McComas, will speak about Dr. McComas and his career.

Dean Vernon E. Wilson, M.D., of the School of Medicine, will make the presentation.

The closing date for submitting essays in the contest was April 1.

Dr. McComas died in 1956. During the period of his practice in Sturgeon he was active in the Missouri State Medical Association, and served on the Judicial Council of the Association for many years. He was Association president in 1922-23. He also had an important role in the establishment of the Ellis Fischel Cancer Hospital, the Crippled Children's Service, and in the growth and development of the University School of Medicine.

Dr. McComas received a degree of Principal of Pedagogy from the University in 1888.

DR. BALDWIN IS "CITIZEN OF THE YEAR"

Paul Baldwin, M.D., Kennett, was named the recipient of *The Daily Dunklin Democrat's* first annual "Citizen of the Year" award.

The citizenship award is based on community and area service and will be presented each year by *The Daily Democrat* to a resident in Southeast Missouri or Northeast Arkansas.

The issue of February 23, 1960, which marked Dr. Baldwin's birthday, carried a picture of Dr. Baldwin and gave his biography and his accomplishments on the front page. Also on the front page was a tribute to Dr. Baldwin by Dr. John McHaney, Jefferson City.

Dr. Baldwin began practicing in Kennett in 1904 and remains in active practice. Dr. Baldwin was on the Association's Council from 1944 to 1950. He is a charter member of the Missouri Academy of General Practice. He helped organize support for the bond issue which provided for the Dunklin County Memorial Hospital and is now a member of the board of trustees of the hospital and has served as chairman since 1950.

In civic work Dr. Baldwin is a past president of the Kennett School Board, of the Lions Club, and was chairman of the Dunklin County Democratic Central Committee. He is also a past president of the Dunklin County Tuberculosis Society.

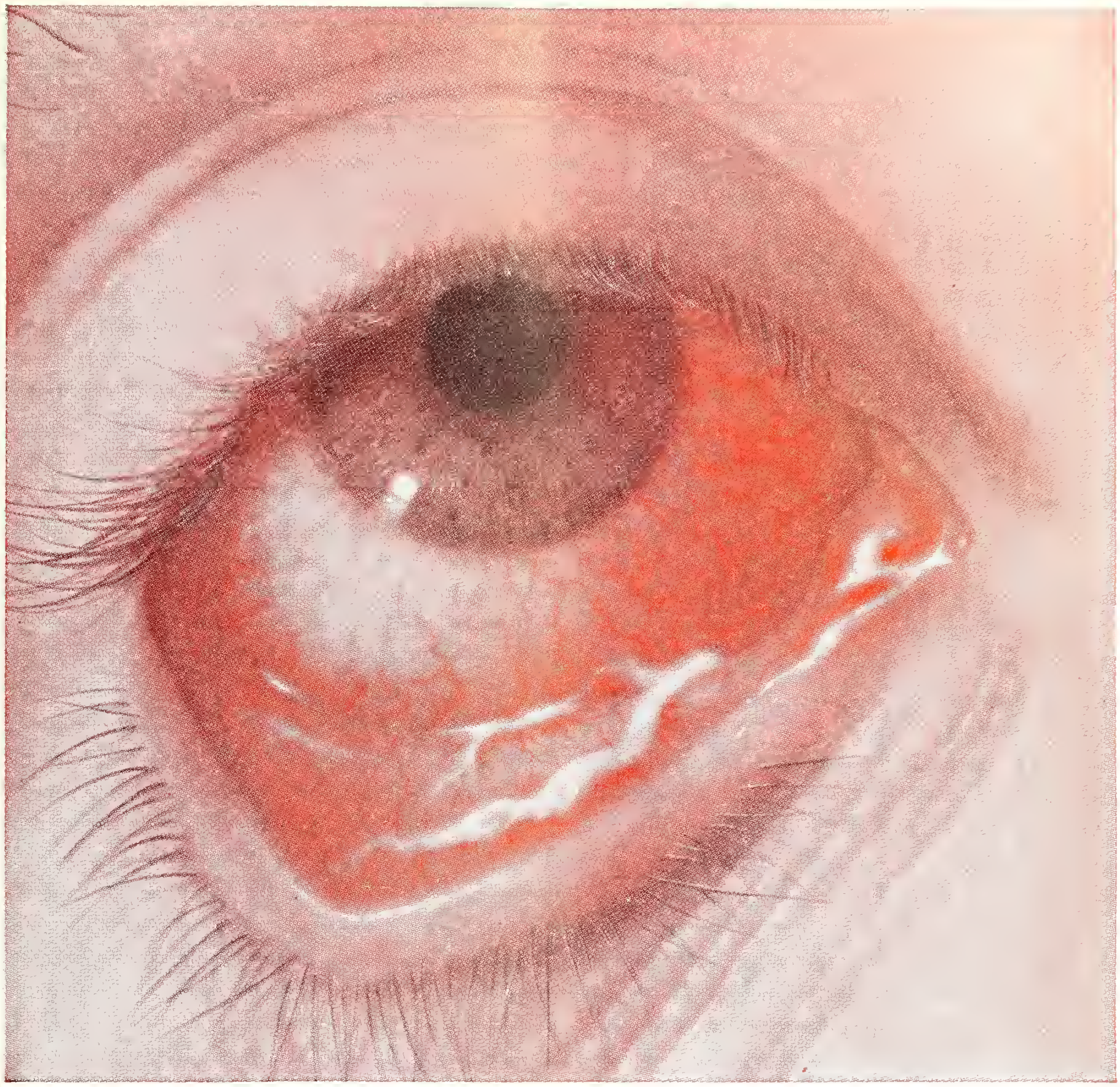
Dr. Baldwin was chosen from 28 men and women nominated for the award.

"MD USA"

The practice of medicine in widely scattered regions of the United States will be the subject of a special hour-long documentary to be telecast over the NBC-TV network on Friday, May 27, at 9:00 p.m.

The program, to be telecast in color as well as black and white, is another in the award-winning "March of Medicine" series produced and sponsored by Smith Kline & French Laboratories in cooperation with the American Medical Association.

Entitled "MD USA," the special report will depict the work of five American physicians in Alaska, Arizona, Louisiana, Pennsylvania and Wisconsin.



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1. Lippmann, O.: Arch. Ophth. **57**:339, March 1957.
2. Gordon, D.M.: Am. J. Ophth. **46**:740, November 1958.

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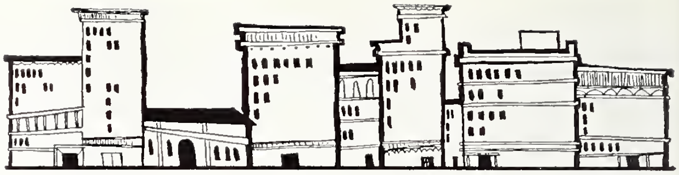
From the Medical Schools



WASHINGTON UNIVERSITY

Research Assembly, Lectures

Original scientific research by eleven senior students at Washington University School of Medicine was presented at the annual Senior Research Assembly in April. The research projects have been carried on in addition to regular classwork during the students' four-year medical school training. Twenty-eight additional student reports were read by title. Students who presented papers were: Floyd E. Bloom, Dallas, Tex.; Dick D. Briggs, Jr., Butler, Ala.; Leonard A. Fahien, Warrenton, Mo.; David T. Hammond, Bluffton, Ind.; Calvin Harmon, Fort Worth, Tex.; George P. Hoech, Jr., Winfield, Mo.; Gordon R. Miller, Miami, Fla.; Karl H. Muench, Evanston, Ill.; John H. Payne, Idaho Falls, Idaho; Eric A. Pfeiffer, St. Louis, Mo.; Martin L. Rubenberg, Brooklyn, N. Y.

Dr. William A. H. Rushton of the physiology department at the University of Cambridge, England, delivered the fifth annual George H. Bishop Lecture in April at the Washington University-Barnes Hospital Medical Center. Dr. Rushton, who is presently a visiting professor at the National Institute of Neurological Diseases and Blindness, Bethesda, discussed encoding and transmission of messages in the nervous system. Elected fellow of the Royal Society in 1948 for his work on the theory of nerve excitation, Dr. Rushton has also published several research papers on the visual mechanism within the eye. The George H. Bishop Lecture was established in 1956 by the Neurology Division of Washington University School of Medicine in honor of Dr. Bishop, professor emeritus and lecturer in neurophysiology, who has been associated with the school since 1921. In 1932, he established the laboratory of neurophysiology in the Oscar Johnson Institute in the Medical Center. Basic research conducted by Dr. Bishop was important in the development of clinical electroencephalography. The lecture was held in conjunction with the annual Neurology-Neurosurgery Alumni Conference.

Dr. W. A. D. Anderson, professor of pathology at the University of Miami School of Medicine, delivered the 25th annual Leo Loeb lecture, April 5. He discussed "Pulmonary Fibrosis, Atypical Hyperplasia and Cancer." The lecture was sponsored by Mu chapter, Phi Beta Pi medical fraternity at Washington University School of Medicine, in honor of Dr. Loeb, professor emeritus of pathology, who died December 28, 1959. Dr. Loeb became professor of comparative pathology at Washington University in 1915 and was head of the department of pathology from 1924 until his retirement in 1937.

Dr. James Barrett Brown, professor of clinical surgery at Washington University School of Medicine, lectured on plastie surgery at medical meetings in Ft. Worth and in San Francisco in April. He was also the representative of the American College of Surgery at the 1960 meeting of the Royal College of Surgeons in Canada

Dr. George J. L. Wulff, Jr., assistant professor of clinical obstetrics and gynecology at Washington University School of Medicine, lectured in Europe as a civilian consultant to the United States Army Surgeon General last March. The tour included Armed Forces hospitals in Germany, Italy, France and Spain.

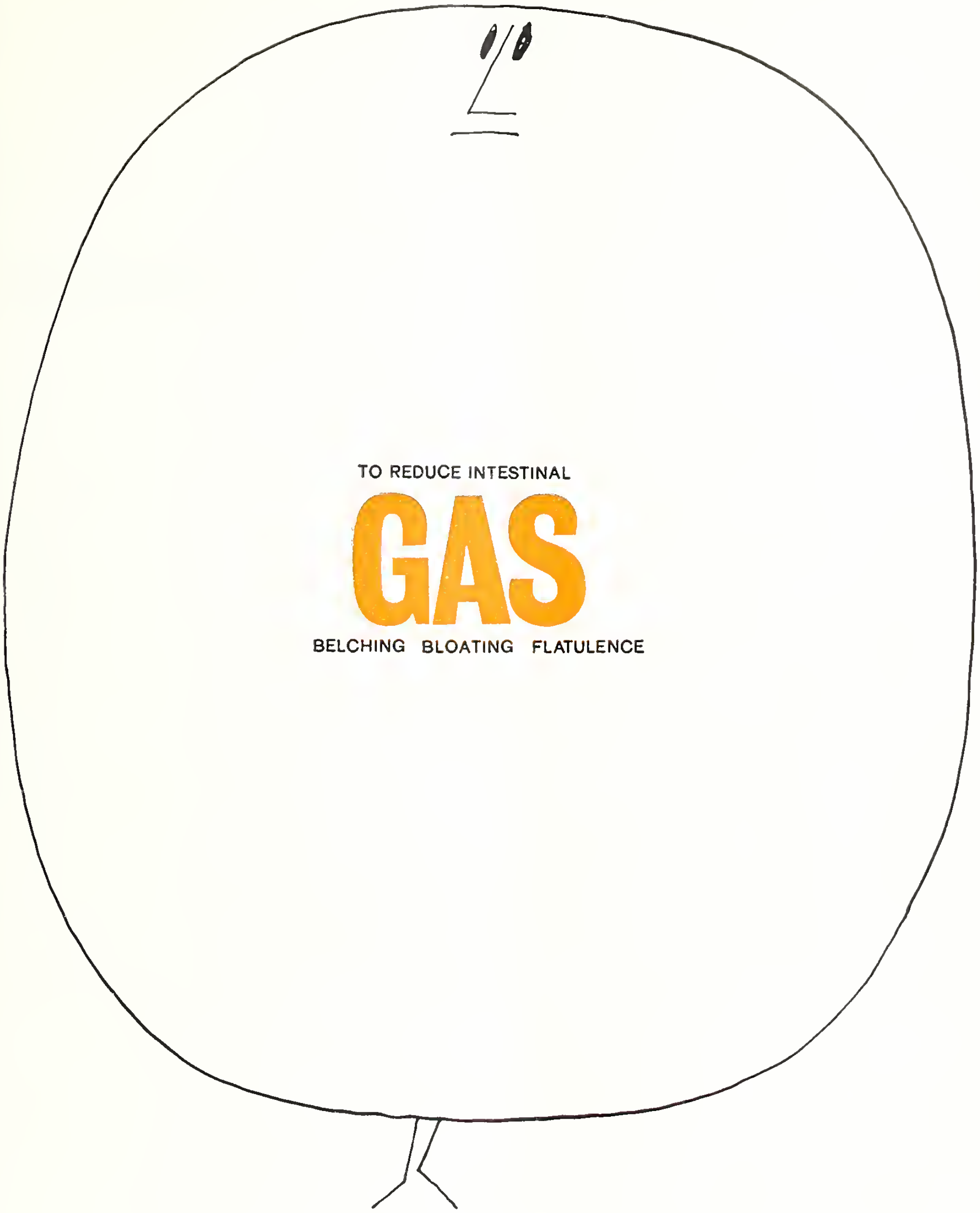
Dr. William H. Daughaday, associate professor of medicine, was guest lecturer at a medical symposium in Chicago in March. He discussed clinical aspects of ketosis

Federation Meeting

Thirty research papers were presented by Washington University staff members at the 44th annual meeting of the Federation of American Societies for Experimental Biology, April 12-15 in Chicago. Papers were given at the Intersociety sessions and at meetings of the American Physiological Society, American Society of Biological Chemists, American Society for Experimental Pathology and American Association of Immunologists.

$1.4 Million Bequest

David P. Wohl, St. Louis shoe executive and philanthropist who died March 2, left stock worth $1,480,000 to Washington University for a hospital and clinics named for his son, it was revealed when Mr Wohl's will was filed in Probate Court, Clayton. The bequest of stock is to be used "solely for the benefit" of the David P.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Wohl, Jr., Memorial Hospital and the David P. Wohl, Jr., Memorial, Washington University Clinics. Mr. Wohl previously gave $1,048,000 toward building the 10-story hospital at 4960 Audubon Ave., which is named for his only son, killed in a bombing raid over Germany in 1944. He contributed $2,000,000 toward the erection of the 10-story clinic building, now under construction.

Award

Dr. Elmer B. Brown, Jr., assistant professor of medicine at Washington University School of Medicine, has received a Lederle Medical Faculty Award, Dean Edward W. Dempsey has announced. The award, administered by an independent committee of professors from medical schools throughout the United States, will provide Dr. Brown's salary for three years and funds for travel to scientific meetings. Dr. Brown joined the medical school staff in 1954 as U. S. Public Health Service trainee in hematology. He was appointed instructor in medicine in 1955 and was granted a leave-of-absence from 1957 until this year to work under the USPHS special research fellowship in enzyme biochemistry at the Enzyme Section, Laboratory of Cellular Physiology, National Heart Institute, Washington, D. C. Other Washington University Medical School staff members who have received the Lederle Medical Faculty Award are Dr. Robert M. O'Neal, assistant professor of pathology, and Dr. Sarah Luse, associate professor of pathology.

UNIVERSITY OF MISSOURI

Meetings and Talks at Medical Center

The monthly meeting of the Medical History Group was held in the Medical Sciences Building on February 26, with guest speaker, Dr. Kenneth O. Keown, professor of anesthesiology, who spoke on "The History of Human Heart Surgery."

On February 29, a guest lecturer, Dr. F. T. Haugen, professor of anesthesiology, at the University of Oregon Medical School spoke on "Mechanisms of Pain" to local faculty, staff, student body and guests in the Medical Center Auditorium.

A meeting of the Boone County Medical Society was held on March 1 in the Medical Center Auditorium.

A symposium on "Dollars and Sense" was held on March 6 in the Medical Center Auditorium. Two films, "Where Shall I Practice" and "Financing the New Practice," were shown followed by several short talks. Medical students and their wives were guests. This program was presented by the St. Louis and the Missouri Academy of General Practice.

The Christian Medical Society sponsored a talk by Dr. Everett Sugarbaker, Jefferson City, on March 12 in the Medical Center Auditorium who spoke on "The Christian Doctor in Everyday Practice."

At the Student Nurses' Association meeting held on March 15 in the Medical Sciences Building, Miss Juanita Windsor, Mineola, Missouri was selected as the University of Missouri's candidate for "The Missouri Student Nurse of the Year." The topic of her speech was entitled "Are We Responsible."

Visitors

On February 17 and 18, Dr. Miriam Neff, with the Health, Education and Welfare Department, Washington, D. C., visited in the Dean's Office and Medical Center. Dr. Neff was conducting a research survey on Hospital Intensive Care Units. She visited various clinical departments, toured the School of Nursing, the hospital, and Medical Sciences Building, and also talked with chairmen of the clinical departments.

Dr. Genevieve Stearns, visiting Professor from the State University of Iowa was a guest of the Department of Pediatrics from February 25 through February 29. While here she gave two lectures, one on "Biochemical Growth" to the second year students and another general lecture, "Nutrition in Pregnancy" for all students and faculty of the Medical School.

On February 17, Dr. Harvey R. Butcher, Jr., Washington University School of Medicine, Department of Surgery, St. Louis, visited the Department of Surgery. Dr. Butcher was guest lecturer for medical students, house staff and faculty and conducted surgical grand rounds.

Trips and Talks

Dr. Vernon E. Wilson, Dean of the School of Medicine and Director of the University Hospital, extended the Welcome to the assembly of the American College of Physicians which met in the Medical Center Auditorium on Saturday, February 20.

During the week of February 22, Dr. Wilson was in Cincinnati, Ohio, for an accreditation visit to the University of Cincinnati School of Medicine which was sponsored by the Association of American Medical Colleges.

Dr. Wilson attended a meeting of the Ministerial Alliance at the Methodist Church, in Columbia, on March 2 and spoke briefly on "Relation of the Minister to the Doctor."

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1. Projection from Vital Statistics, U.S. Government Dept. HEW, Vol. 48, No. 14, 1958, p. 398.
2. Modell, W.: Drugs of Choice 1958-1959, St. Louis, C. V. Mosby Company, 1958, p. 347.

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On March 2, Dr. Wilson and Dr. Thorpe Ray, professor and chairman of the Department of Medicine, met with the program planning committee of the White House Conference on Aging regarding the Regional meeting to be held at Fulton on March 21.

Dr. John McHaney, President of the Missouri Medical Alumni Association, from Jefferson City, was in Dr. Wilson's office on March 11, to discuss plans for the alumni meeting at St. Louis during the Missouri State Medical Association Annual Meeting.

Dr. Wilson attended a meeting of the Missouri State Medical Association at St. Louis, on March 14-15. Dr. and Mrs. Wilson attended the annual banquet on March 15 of the Missouri State Medical Association at the Sheraton-Jefferson Hotel where the speaker was Dr. Louis Orr, President of the American Medical Association.

Dr. Wilson was the speaker on March 15, at the Missouri Alumni Association luncheon in the Gold Room of the Sheraton-Jefferson Hotel. His subject was "Your Alumni Organization and You."

On February 29, March 10 and March 14, Dr. J. C. Thaemert, assistant professor of anatomy, visited Dr. H. T. Blumenthal's Laboratory of Experimental Pathology at Jewish Hospital in St. Louis to do research with the electron microscope.

Dr. Frank B. Engley, Jr., assistant dean and professor and Chairman of the Department of Microbiology, spoke to the In-Service Nurse Training group on "Air Borne Infections and Hospital Environment" on February 16, in the Medical Center, and also spoke to Dietetics Group on "Microbiology, Food Handling, and Food Poisoning."

Dr. James T. Barrett, associate professor of microbiology, prepared a display of books and papers on Microbiology in the lobby of the University's General Library from February 13 to 29

On March 8, Dr. D. P. Durand, assistant professor of microbiology and Dr. C. E. Brooke, assistant professor of pediatrics, attended a meeting of the Ozark Medical Society at Mount Vernon, Missouri. They presented a program to the society "Our Current Knowledge in Virology."

Dr. J. S. Roden, professor and chairman, Department of Obstetrics and Gynecology, and Dr. H. M. Haugen, assistant professor of obstetrics and gynecology, attended a refresher course on "Management of Common Obstetric Problems" at the Missouri State Medical Association meeting held at St. Louis, March 14-16.

On March 5, Dr. Robert L. Jackson, professor and chairman, Department of Pediatrics, attended a meeting of the American Medical Association Committee on Scientific Activities which was held in Chicago. They discussed current activities of the Food and Nutrition Board.

Dr. Venudhar Reddy and Dr. James Mann, assistant instructors and first year residents in pediatrics, attended meetings at the University of Kansas Medical Center on March 7-9, which were sponsored by the University of Kansas School of Medicine, The Children's Mercy Hospital of Kansas City and the Kansas Medical Society. Case discussions and research papers were presented at these meetings.

From February 24 to 26, Dr. James Randall, associate professor of physiology and biophysics, presented a paper "Biophysics in One Medical Curriculum" at the education session of the Biophysical Society meetings held at Philadelphia, Pennsylvania.

Dr. M. L. Zatzman, assistant professor of physiology, attended the Biophysical Society meeting in Philadelphia, Pennsylvania, February 24-26.

Dr. M. Pinson Neal, professor emeritus of pathology, attended the Missouri State Medical Association meeting and University of Missouri Medical Alumni Organization meeting at St. Louis on March 13-16. Dr. Neal served as a member of the Credentials Committee, as a member of the House of Delegates to the Missouri State Medical Association meeting from Boone County and a member of Committee on Scientific and Postgraduate Work of the State Medical Association.

Dr. Vincent P. Perna, assistant professor of pathology, Mrs. Ruby Bell and Mrs. Jean Marshall, registered technicians and instructors in medical technology, attended the Missouri Society of Medical Technologists and Missouri Association of Blood Banks at St. Louis, March 13-16. Dr. Perna participated in a panel discussion on "Record Keeping in Blood Banks."

Dr. Theodore E. Keath, professor of radiology, attended the Missouri State Medical Association meeting held at St. Louis on March 14-15 where he participated as a member of a panel on "Peripheral Vascular Disease."

Dr. Hugh E. Stephenson, Jr., professor and chairman, Department of Surgery, attended the annual meeting of the Missouri Chapter, American College of Chest Physicians held on March 13 in Hotel Statler at St. Louis.

On March 14-15, Dr. Stephenson attended the Missouri State Medical Association meeting where he was on the program and also attended

in infectious disease[17,22,30,38]
in arthritis[18,19,20,29]
in hepatic disease[2,3,4,5,38]
in malabsorption syndrome[1,2,6,27]
in degenerative disease[6,7,19,20,40]
in cardiac disease[23,28,29,38,41]
in dermatitis[24,39]
in peptic ulcer[8,21,38]
in neuroses & psychiatric disorders[25,26]
in diabetes mellitus[31,32,33,38]
in alcoholism[9,11,35,37,38]
in ulcerative colitis[10,14,16]
in osteoporosis[13,19,20]
in pancreatitis[15]
in female climacteric[12,34]

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1-41 a list of the above references will be supplied on request.

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the University of Missouri Medical Alumni Association luncheon.

Dr. Ian M. Thompson, associate professor of urology, and Dr. Carl H. Almond, assistant professor, Department of Surgery, visited the Eaton Laboratories in Norwich, New York, on March 3 in reference to a research project: Stop Flow Analysis of Nephron Transport Site of Furahtadare Hydrochloride. They also helped with the formulation of an exhibit on stop flow analysis of nephron transport for the American Urological Association meeting to be held at Chicago in May.

Dr. Thompson attended the American Urological Association, South Eastern Section meeting in Jacksonville, Florida, March 12-17 where he presented a paper on "Polycystic Disease of the Kidney."

On March 16, Dr. John H. Landor, assistant professor of surgery, attended the meeting of the Missouri State Medical Association held in the Sheraton-Jefferson Hotel at St. Louis.

Dr. Warren Sights, assistant professor of neurosurgery, attended a Clinical Pathological Conference with Dr. Joseph E. Flynn, professor and chairman of the Department of Pathology, at the Audrain County Medical Society meeting on March 8, at Mexico.

Dr. Carl H. Almond, assistant professor of surgery, attended the Missouri State Medical Association meeting held in the Sheraton-Jefferson Hotel at St. Louis, on March 15.

Dr. Robert E. Paulette, instructor in surgery, Dr. Karl Moedl, assistant instructor and third year resident in surgery, and Dr. Edwin Carter, assistant instructor and third year resident in orthopedic surgery, attended the Central Missouri Chapter American College of Surgeons Meeting and participated in a program on 'Tumors of Childhood" which was held at Hathman House on February 25.

Dr. Edward Johnson, assistant instructor and second year resident in surgery, attended the Southern Section Meeting of the American Urological Association in Jacksonville, Florida, on March 13.

New Appointments

Dr. John G. Schuder has been appointed research associate professor of surgery, effective July 1, 1960. Dr. Schuder received his B.S.E.E. in 1943 from the University of Illinois, his M.S.E.E. in 1951 from Purdue University and his Ph.D. in 1954 from Purdue University. Presently he is employed as assistant professor of electrical engineering in surgical research at the University of Pennsylvania.

Dr. David Davis has been appointed assistant professor of psychiatry, effective June 1, 1960. Dr. Davis received his M.B. in 1949 from Shawlands Academy, Glasgow, Scotland, his Ch.B. from Glasgow University in 1949 and Diploma in Psychological Medicine, Conjoint Board of the Royal Colleges of Physicians and Surgeons (England) in 1954. Dr. Davis is now a senior hospital medical officer in psychiatry, Borocourt Hospital, London, England.

Dr. Lucile Frances Adamson has been appointed research assistant professor of biochemistry in pediatrics effective June 1, 1960. Dr. Adamson received her B.S. in Industrial Chemistry in 1948 from Kansas State College, her M.S. in 1950 from State University of Iowa, and Ph.D. in Physiological Chemistry. She is presently assistant nutritionist at the University of Hawaii.

Dr. James C. Cope was appointed clinical assistant professor of surgery (urology) effective January 1. Dr. Cope received his A.B. from William Jewell College in 1937, his B.S. and M.A. in 1939 from the University of Missouri and his M.D. in 1941 from New York University Medical College. At present he is in private practice in urology in Columbia.

Dr. Eigil Thor Dingsor has been appointed assistant instructor in surgery (urology) and third year resident effective July 1, 1960. Dr. Dingsor received his M.D. in 1950 from the University of Oslo, Bergen, Norway. At the present time he is first assistant surgeon, Surgical Department, Innherred County Hospital, Levanger, Norway.

Dr. Robert Allison Smith as been appointed assistant instructor and third year resident in surgery (urology) effective July 1, 1960. Dr. Smith received his M.D. from the University of Buffalo School of Medicine in 1955. At the present time, Dr. Smith is at the U. S. Navy Hospital, Corpus Christi, Texas.

Dr. Garth S. Russell has been appointed research associate in surgery in the Eye Tissue Bank, School of Medicine effective July 1, 1960. Dr. Russell received his B.S. in 1953, from Kansas State University and M.D. from the University of Kansas School of Medicine in 1959. At the present time Dr. Russell is interning at Wesley Hospital, Wichita, Kansas.

Dr. Harold Dean Wilkins has been appointed assistant instructor and first year resident in radiology effective July 1, 1960. Dr. Wilkins received his M.D. from the Oklahoma University School of Medicine in 1959. Dr. Wilkins is pres-

(Continued on page 630)

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ently interning at St. Anthony Hospital in Oklahoma City, Oklahoma.

Preceptors in General Practice

The third group, for the academic year 1959-60, of fourth year students of the University of Missouri School of Medicine has been assigned to preceptorships under Missouri physicians in general practice. These students served six week preceptorships from February 29 through April 11, 1960.

Students in this group and the Preceptor under whom they are working are: Robert G. Laffoon, Union Star, Missouri, under Drs. Paul Roberts and Charles Worley, Sweet Springs; Bernard J. Melia, Jr., Independence, Missouri, under Dr. Charles S. Price, Cassville; Dionisio Negrete, Kansas City, under Dr. W. A. Broyles, Bethany; Leo M. Wyrsch, Jr., Springfield, Missouri, under Dr. Graham Parker, Platte City.

The preceptors were selected by the Committee on Medical Education and Hospitals of the Missouri State Medical Association and were appointed to serve by the University of Missouri Board of Curators. Preceptorships are elective courses offering credit toward the student's M.D. degree and the students are graded on their ability by the physician under whom they serve. During this period they work directly under the supervision of the physician in his office and go with him on house calls and perform similar duties with the physician.

ST. LOUIS UNIVERSITY

Grants

The Pharmacology Department of the St. Louis University School of Medicine has been awarded recent research grants totaling $399,697 by the United States Public Health Service and the National Science Foundation.

Dean James W. Colbert, Jr., announced that two of the grants from the United States Public Health Service were for a five year period and totaled $294,835. An award of $160,000 was issued to Dr. Elijah Adams, Director of the Department of Pharmacology for studies of the metabolism of amino acids, with particular attention to hydroxyproline, an amino acid found specifically in connective tissue. The grant allots $35,893 for the first year of research.

Dr. Adams also recently received an award of $36,600 from the National Science Foundation for support of research on possible ways of breaking down toxic compounds in the body by using enzymes that can change these compounds chemically so as to make them harmless. In particular, enzymes from bacteria will be studied, because many bacteria have the ability to make enzymes that break down a variety of chemical substances. Such enzymes might have the medical application of treating certain cases of poisoning in humans.

The second five-year award made by the United States Public Health Service was to Dr. Harold L. Segal, assistant professor of pharmacology, who received $134,835 for studies of the relationship of hormones to metabolism. The grant allots $26,967 each year.

Most biochemists believe that the responses of the body to hormones are brought about by control of the activity of enzymes in the tissue. Dr. Segal is attempting to discover what enzyme activities are controlled by different hormones, how the hormones exert their control and how normal body function depends upon this control. Included in his research are studies into the question of why a lack of insulin in the diabetic produces a derangement of body metabolism, including, in some cases, high blood ketone and cholesterol levels.

Dr. Segal also received a United States Public Health Service grant award for $39,622 for studies of pathways of sulfate metabolism in living tissues. A number of compounds of considerable physiologic interest exist in sulfated forms in the body. These include some proteins and components of connective tissue.

In this investigation, Dr. Segal is attempting to gain an understanding of the biochemical reactions by which these compounds are formed in the body. Research findings may result in new knowledge concerning diseases in which these reactions are altered, for example, some forms of arthritis.

Dr. Clark Bublitz, senior instructor in pharmacology, received a United States Public Health Service grant totaling $28,640 for an investigation of steps in the synthesis of vitamin C.

In vitamin C synthesis, scientists have found that the dietary requirement in certain animals, including man, is apparently due to the lack of a particular enzyme, which is essential for this synthesis. If vitamin C is not present in the diet, the animals develop deficiency symptoms.

In his studies, Dr. Bublitz is attempting to provide information pertinent to the function of vitamin C at the molecular level. Vitamin C is one of the vitamins whose functions at a molecular level has not been made clear. Certain of the other vitamins are known to function with en-

(Continued on page 632)

relieves both stiffness and pain with safety... sustained effect

In 100 consecutive patients with the low back syndrome, Kestler[1] reported that particularly gratifying was the ability of SOMA "to relax muscular spasm, relieve pain, and restore normal movement, thus speeding recovery in a large majority of the patients."

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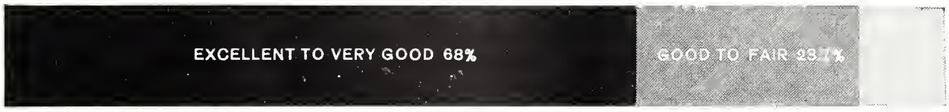

*Investigators' reports to the Medical Department, Wallace Laboratories. (Total of 278 cases)

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SUPPLIED—as white, coated, 350 mg. tablets, bottles of 50; also available for pediatric use: 250 mg., orange capsules, bottles of 50

1. Kestler, O.: In The Pharmacology and Clinical Usefulness of Carisoprodol, Wayne State University Press, Detroit, 1959. 2. Berger, F. M.; Kletzkin, M.; Ludwig, B. J.; Margolin, S., and Powell, L. S.: J. Pharm. Exp. Ther. *127*:66 (Sept.) 1959. 3. Spears, C. E. and Phelps, W. M.: Arch. Pediat. *76*:287 (July) 1959. 4. Phelps, W. M.: Arch. Pediat. *76*:243 (June) 1959. 5. Friedman, A. P.; Frankel, K., and Fransway, R. L.: Papers presented at Scientific Meeting, New York State Society of Industrial Medicine, Inc., New York, Sept. 30, 1959. 6. Kuge, T.: Unpublished reports. 7. Ostrowski, J. P.: Orthopedics 2:7 (Jan.) 1960.

Literature and samples on request

Also available on request: The Pharmacology and Clinical Usefulness of Carisoprodol, Wayne State University Press, Detroit, 1959. (185 pages)

SOMA T. M.

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WALLACE LABORATORIES, New Brunswick, New Jersey

zymes in a conjugated form known as co-enzymes.

Other active research in the department is being conducted by Dr. Irving A. Coret, assistant professor of pharmacology and Dr. Ernest C. Griesemer, instructor in pharmacology. Under a United States Public Health Service grant, which was announced in December, they are examining responses of muscle to chemical agents and to light. Under a St. Louis Heart Association grant previously announced, Dr. Coret is also studying the effects of certain chemicals on the blood vessels of the body.

Lectures

Dr. R. Walter Schlesinger, director of the department of microbiology, gave a lecture on "The Biology and Biochemistry of Adenovirus-Infected Cells" at the Indiana University School of Medicine on March 21. He also lectured on "Persistent Virus Infection of Human Cells" at the University Club on March 30.

Dr. John P. Wyatt, professor of pathology, spoke on "Coal Workers' Pneumoconiosis" before the annual meeting of the Missouri Chapter of the American College of Chest Physicians luncheon meeting at the Statler Hotel March 27. Dr. Wyatt was also a guest speaker at a seminar conducted at Marquette University March 22. He spoke on "Iron Metabolism."

Dr. Cecil J. Watson, professor and director, division of internal medicine, University of Minnesota School of Medicine delivered the annual Hanau W. Loeb lecture sponsored by the Alpha Pi Chapter of the Phi Delta Epsilon Medical Fraternity on April 1. Dr. Watson spoke on "Some Recent Studies in the Porphria Problem in Man and Animals." The lecture is held annually in honor of the late Hanau W. Loeb, who served as dean of the School of Medicine from 1914 until 1927.

Dr. David P. Earle, Jr., professor of medicine at Northwestern University, delivered the annual William H. Vogt lecture sponsored by the Alpha Kappa Kappa fraternity on March 18. Dr. Earle lectured on "Acute and Chronic Nephritis." The lecture was established in 1950 in honor of the late Dr. William H. Vogt, who was a member of the fraternity and professor and director of the department of gynecology and obstetrics at the University. Dr. Vogt was a member of the School of Medicine faculty from 1919 until his

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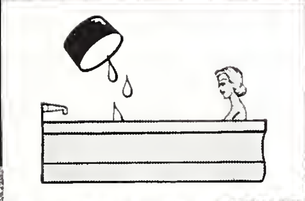

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[1] *Spoor, H. J.: N. Y. State J. Med. Oct. 15, 1958*

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death in 1945. His son, Dr. William H. Vogt, Jr. is associate professor of clinical gynecology and obstetrics at the University.

Dr. Eduard Kellenberger, professor of biophysics at the University of Geneva, visited the department of microbiology on March 22 and March 23. He delivered a lecture on "The Physical State of the Bacterial Nucleus" on March 22 and on the "Structure and Assembly of Bacteriophage" on March 23.

Dr. William A. Knight, Jr., associate professor of internal medicine, attended the American Gastroenterology Association meeting in New Orleans the last week in March.

CLINIC ON CRIPPLED CHILDREN

Dr. Russell Meyers, professor of surgery and Chairman of the Division of Neurosurgery, State University of Iowa, will conduct a clinic under the auspices of the St. Louis Society for Crippled Children on May 6, at the Society's new center, 4108 Lindell Boulevard. The clinic will be in session from 2:00 to 5:00 p.m.

Dr. Meyers is being brought to St. Louis by the Society primarily for consultation on a number of children within the Society's program who may profit by brain surgery.

Assisting Dr. Meyers in the clinic and in the presentation of cases which he will discuss will be members of the Society's Medical Advisory Committee, which consists of Dr. John Herweg, chairman, Dr. Robert L. Korn, Dr. Kathleen Winters, Dr. David Mendelson, Dr. Stuart Weiss, Dr. Alex Harell, Dr. D. Elliott O'Reilly, Dr. Garland Smith and Dr. Warren G. Stamp. Attendance at the clinic will be limited to physicians.

AMERICAN PHYSICIANS' ART ASSOCIATION

The 23rd annual exhibition of art works by American physicians will be held June 13 through June 18, 1960, at the Miami Beach Exhibition Hall and Auditorium, it has been announced by Lewis M. Johnson, M.D., President of the American Physicians' Art Association.

Held in conjunction with the annual convention of the American Medical Association, the show will include more than 300 works of art in oil, water color, sculpture, crafts, photography and lithography.

Participants and prospective exhibitors may obtain further information from Dr. Kurt F. Falkson, 7 East 78th Street, New York City, Secretary of the American Physicians' Art Association.

A.M.A.

(Continued from page 603)

Detroit, "Critique of Occlusive Disease of the Carotid Artery and the Stroke Syndrome." Leo H. Bartemeier, Baltimore, "Comments on the Relations Between Psychiatrists and Other Physicians."

Obstetrics and Gynecology: Stirling G. Pillsbury, Long Beach, Calif., "31,595 Deliveries With One Maternal Death." Jerome M. Kummer, Santa Monica, Calif., "An Answer for Criminal Abortion."

Internal Medicine: "Symposium on Hypocholesteremic Drugs." Walter L. Palmer, Chicago, "The Billings Lecture: Causality in Peptic Ulcer." Rudolph H. Kampmeier, Nashville, Tenn., "Collagen Diseases—Some Unanswered Questions.

Laryngology, Otology and Rhinology: George A. Sisson, Syracuse, N. Y., "Problems and Complications in Head and Neck Surgery." C. M. Kos, Iowa City, Iowa, "Five Year Results of Stapes Mobilization and Current Results With Vein Plug Stapedeoplasty."

Preventive Medicine: Jan H. Tillisch, Rochester, Minn., "Medical Aspects of Safety in the Air." Robert B. Stonehill, San Antonio, Texas, "Air Travel and the Cardiopulmonary Patient," a film presentation.

Orthopedic Surgery: Sidney Keats, Newark, N. J., "Surgery of the Extremities in the Treatment of Cerebral Palsy." H. R. McCarroll, St. Louis, Mo., "The Management of Complicated Ununited Fractures of the Tibia and Fibula."

Pediatrics: Leonard S. Sommer, Miami, moderator, "Symposium on Congenital Heart Disease—Present-Day Status From Viewpoint of Practitioner of Medicine."

The section on Miscellaneous Topics will feature a half day session on the "Management of the Older Patient." Participants include Philip Thorek, Chicago.

Exhibits Number 290

About 290 exhibits will be on display in the Miami Beach Exhibition Hall, representing the most outstanding exhibits selected from 540 applications.

(Continued on page 636)

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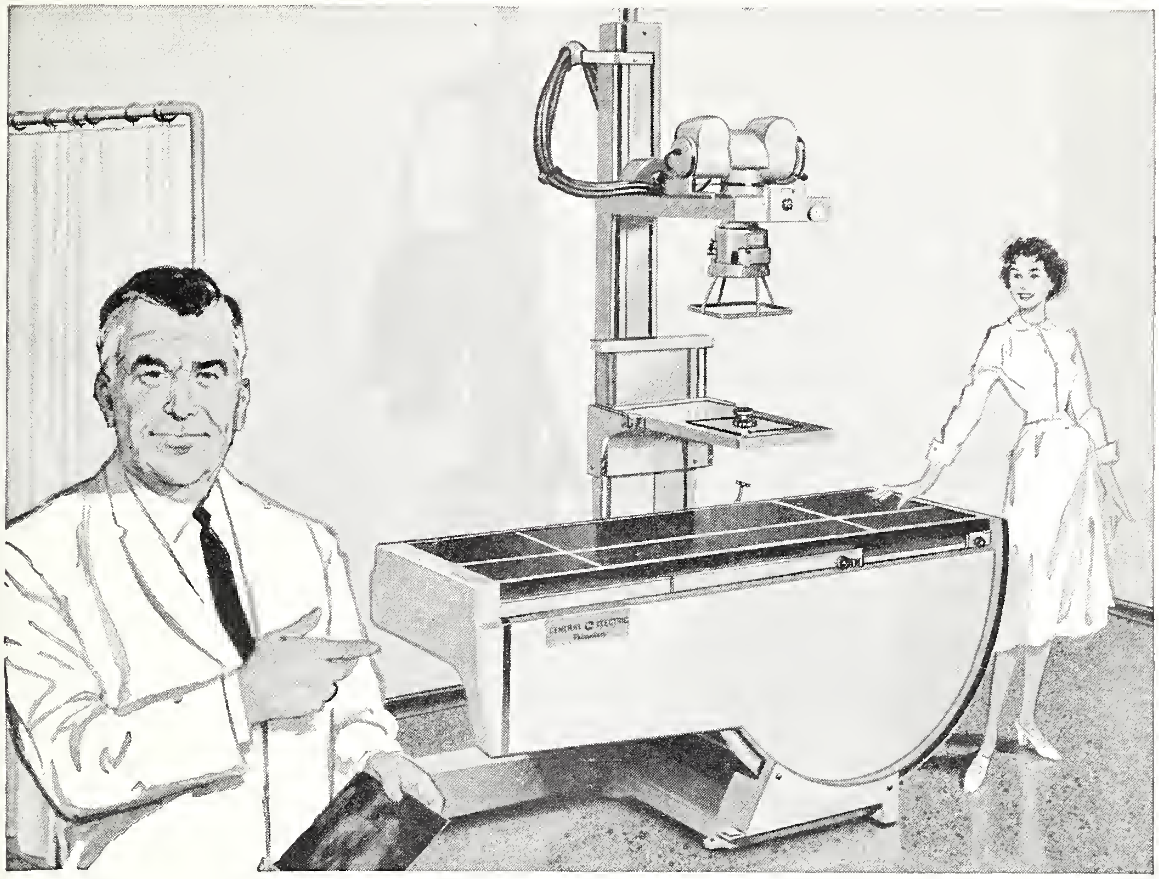

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A new special exhibit on "Body Fluid Disturbances," offering a complete course in body fluids, will be presented in its entirety on two days. Different aspects will begin at specific times to permit physicians to attend only those parts in which they are particularly interested.

A special exhibit on fractures will include booths on fractures of the ankle, hip, wrist, tibia and fibula, children's fractures, and fractures resulting from falls on the outstretched hand. About 50 prominent orthopedic surgeons will take part in the demonstrations at this exhibit.

Specials on "Pulmonary Function" and "Fresh Tissue Pathology" also will be highlighted in the scientific exhibition area.

An outstanding program on motion pictures and television, which will be coordinated with the rest of the scientific program, will be presented also in the Miami Beach Exhibition Hall.

RAMBLINGS

(Continued from page 606)

souri Medical Center will be held. (Program given on Missouri Academy of General Practice page of this issue.) This will give eleven hours of acceptable Category I postgraduate credit for Academy members.

On Sunday, June 26, a "Symposium on Clinical Medicine and Surgery" will be held at Holiday Inn, Springfield, sponsored by the Southwest Missouri Chapter of the Missouri Academy of General Practice and the Greene County Medical Society. It will begin with a luncheon at 12:00 noon, and close with a reception from 5:30 p.m. to 6:30 p.m. There is no registration fee, lunch and reception free, compliments of Lederle Laboratories. The program follows:

Luncheon Speaker: Edward M. Litin, M.D., Rochester, Minn., "The Spoiled Brat—The Problem Parent." Afternoon session, E. Newton Hesbacher, M.D., Danville, Pennsylvania, "What Is This Rash?" John P. Utz, M.D., Bethesda, Maryland, "Management of the Virus." Goodrich C. Schauffler, M.D., Portland, Oregon, "Gynecologic Problems in the Adolescent." William Requarth, M.D., Decatur, Ill., "The Treatment of Traumatic Wounds." This is acceptable for four hours Category I postgraduate credit for Academy members.

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WOMAN'S AUXILIARY

(Continued from page 566)

for County Auxiliaries. Mrs. Franklyn Werner, Mrs. W. E. Martin and the four Vice-presidents make up the committee.

For the first time we shall have a State Directory of Auxiliary members. It will be a part of the Directory of the Missouri State Medical Association sent out annually to doctors in July. Ask your husband to bring his copy home from the office when he receives it. Mrs. Henry S. Bauman, Mrs. Stanley S. Peterson and Mrs. Lawrence S. Crispell form the Directory Committee.

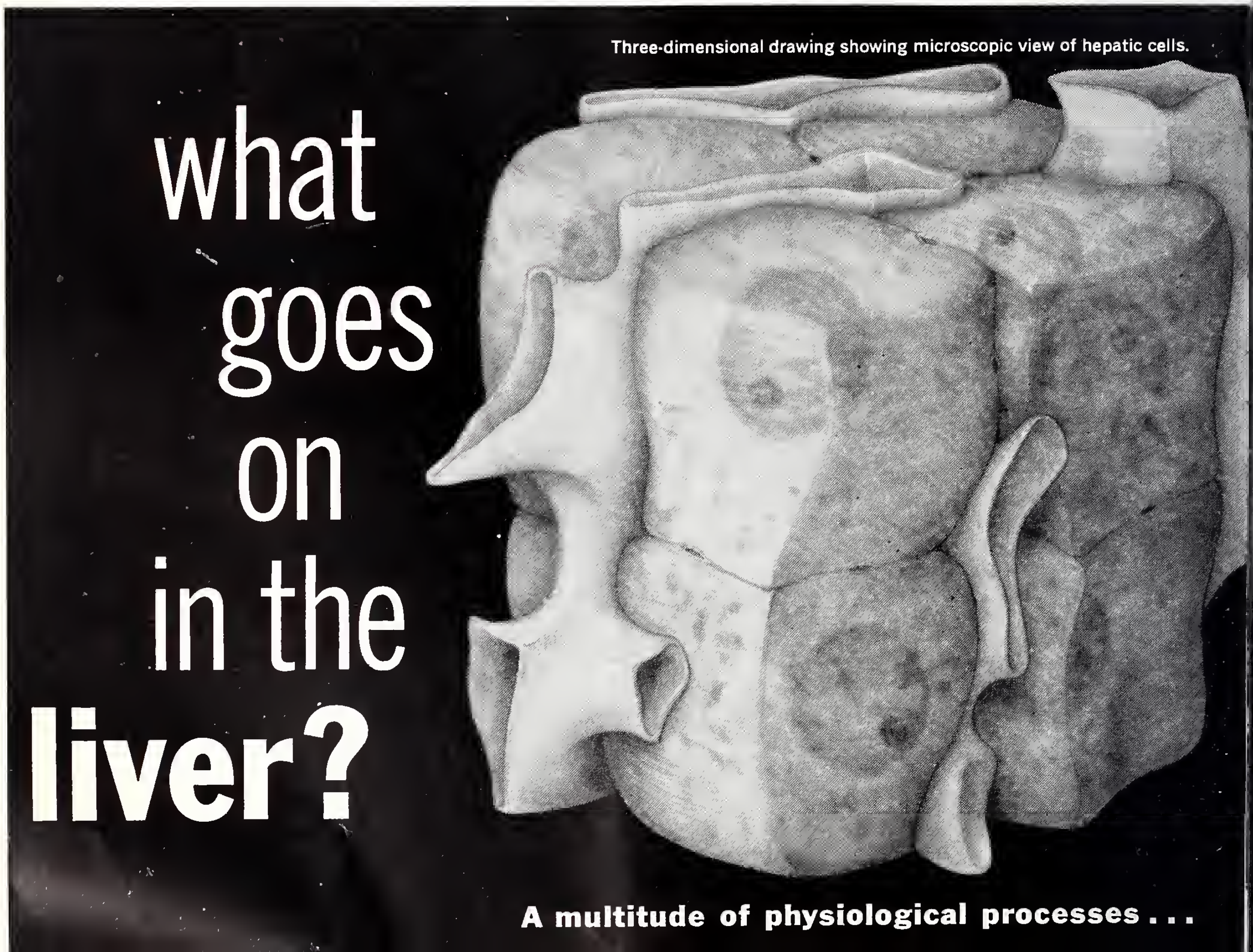
A fine piece of equipment for Medical Careers Recruitment will be purchased and will be placed in charge of Mrs. Earl Hobbs of Smithville, our new Careers Recruitment Chairman, who will send it out to county groups upon request. This is a three-panel, folding-type table display and we want all counties to make use of it. Write to Mrs. Hobbs and she will send it to you, the only expense to the County Auxiliaries being the payment of return postage.

Mrs. Stanley S. Peterson, Mrs. John W. Deyton, Mrs. Henry C. Bauman, Mrs. Ralph Perry and Mrs. James Sweiger will be our Nominating Committee; and Mrs. David Allen was elected to be the new member of the Medical Student Loan Fund.

Some outstanding work was done by Auxiliary members who volunteered to "man" a letter-writing booth for letters to congressmen, placed near the registration desk, and these members addressed letters and handed out ribbons printed "LETTER—YES" for all letter writers to pin to their registration badges.

We have a wonderful, wonderful group of Chairmen of Standing Committees who are eager to work and to help you to make this an outstanding year in your county groups. Call on them, write to them, let them help you. Only by establishing effective liaison between state and county can we reach our maximum accomplishments.

Keep on taking individual responsibility in your communities. "Auxiliary" cannot be spelled without "U." "Recruitment" and "Community Service" must have "U." You cannot even start "United Effort" without "U." Unfortunately, "Legislation" can be formed without "U." But let's all take responsibility in the coming year to be able to point with pride at ourselves and say, "I *is* a part of Legislation."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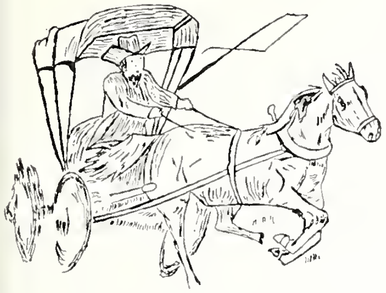
Missouri Medicine in Review



FORTY YEARS AGO

The sixty-third annual meeting of the Association adjourned April 8, after one of the most interesting sessions it has ever held. St. Joseph was chosen for the next place of meeting, and the following officers were elected: President, W. J. Ferguson, Sedalia; vice presidents, R. L. Neff, Joplin; T. J. Rigdon, Kennett; T. C. Chowning, Hannibal; W. C. Gayler, St. Louis; J. Q. Chambers, Kansas City. Councilors, Second District, O. C. Gebhart, St. Joseph; Third District, W. D. Vandivert, Bethany; Fourth District, J. B. Wright, Trenton; Fifth District, J. R. Bridges, Kahoka; Sixth District, J. W. Martin, Kirksville; Seventh District, T. J. Downing, New London; Eleventh District, G. W. Hawkins, Salisbury; Twelfth District, Spence Redman, Platte City; Sixteenth District, G. D. Allee, Lamar; Seventeenth District, Guy Titsworth, Sedalia. Delegates to the American Medical Association: F. E. Murphy, Kansas City, two years; S. L. Baysinger, Rolla, two years; C. R. Woodson, St. Joseph, two years; Elsworth Smith, St. Louis, one year.

Dr. R. A. Woolsey of St. Louis, for a number of years a member of the medical department of the Frisco Railroad, has been appointed chief surgeon of the Frisco System, succeeding Dr. G. W. Cale, resigned.

Dr. A. M. Wood of Lentner, secretary of Shelby County Medical Society for a number of

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years, has accepted a medical commission from the American Red Cross to assist in the fight against the typhus epidemic in Holland and the Baltics. Dr. Wood sailed the latter part of March.

Dr. F. M. Vessells of Perryville, who served for eighteen months in the Medical Corps of the Army during the World War, has been decorated by the French government with the Order of University Palms.

TWENTY-FIVE YEARS AGO

The Public Welfare Committee of the Board of Aldermen of St. Louis is to be commended on disapproving a bill which would have made it impossible for the medical schools to obtain dogs from the city pound for experimental purposes. The board met with much opposition as there was widespread agitation for its passage, although the *St. Louis Post-Dispatch* consistently opposed the bill which would "hold St. Louis up to ridicule in the scientific world."

Dr. Edwin H. Schorer, Kansas City, has been appointed Director of Health of Kansas City to succeed Dr. Jabez N. Jackson who died March 18.

The first contracts for construction of buildings at state institutions under the $10,000,000 bond issue were awarded April 10. The two contracts included an addition to Lloyd Cottage at the Mount Vernon Sanatorium and a dormitory at State Hospital No. 3 at Nevada. Plans and specifications for seven buildings at the Algoa Reformatory were ordered prepared. Dr. Ralf Hanks, Fulton, was appointed on April 8 as superintendent of State Hospital No. 1 at Fulton to succeed Dr. R. C. Fagley, resigned.

Members of the class graduated in 1940 from the Washington University School of Medicine were guests at the home of Dr. Stanley S. Burns, St. Louis, on March 31.

Dr. Fred T. Foard and Dr. Ernest E. Huber, United States Public Health Service, Washington, D. C., began a survey of the health conditions and the health agencies in St. Louis County April 2. The physicians came at the request of the county court to make recommendations for the more economical operation of the County Health Department.

Dr. Edward A. Doisy, St. Louis, professor of chemistry, St. Louis University School of Medicine, was presented with a medal and certificate of award for meritorious scientific contributions by the St. Louis Medical Society on March 19.

(Continued on page 644)

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MISSOURI MEDICINE IN REVIEW

(Continued from page 640)

The award was made for his work on the female sex hormones. In 1927, the last time the award was made, the medal was presented to Drs. Evart A. Graham, G. H. Copher, Warren H. Cole and Sherwood Moore, St. Louis, for the work in gallbladder visualization.

TEN YEARS AGO

Merit awards for service to the hospital were presented to Walter C. G. Kirchner, M.D., St. Louis, and the late Joseph Grindon, M.D., St. Louis, by the City Hospital Alumni Association at a meeting March 29 in St. Louis.

Harry Statland, M.D., Kansas City, spoke before the American Goiter Association at Houston, Texas, on March 10. His subject was "The Relationship of Thyroid Diseases to Adrenal Cortical Function."

The hundredth anniversary meeting of the Missouri State Medical Association is now history. A total of 2,430 persons registered. This number is 50 per cent greater than at any previous meeting of the Association. An editorial in the *St. Louis Globe-Democrat* on March 29, not only gives a good summary of the meeting, but also is indicative of the past leadership of the profession. It points out as well the great opportunity to bring even greater glory to the Association.

BUREAU OF AVIATION MEDICINE

Angelo Lapi, M.D., Kansas City, is one of a panel of physicians who will be available for on-scene medical investigation of plane accidents. The panel held a three-day indoctrination period in Washington on April 19.

FAA has changed the name of Office of Civil Air Surgeon to Bureau of Aviation Medicine, emphasizing parity of its medical unit with other administrative branches.

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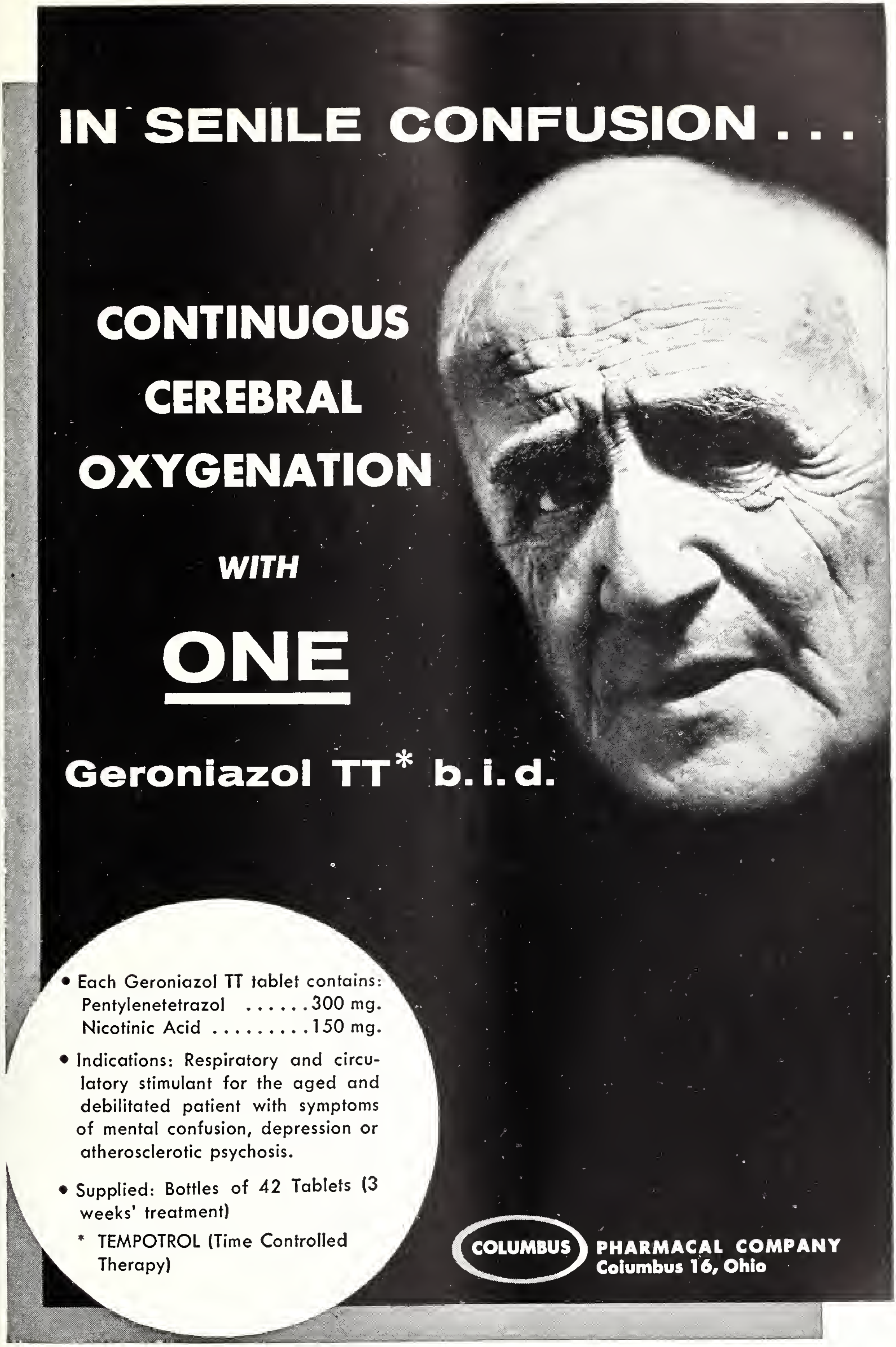

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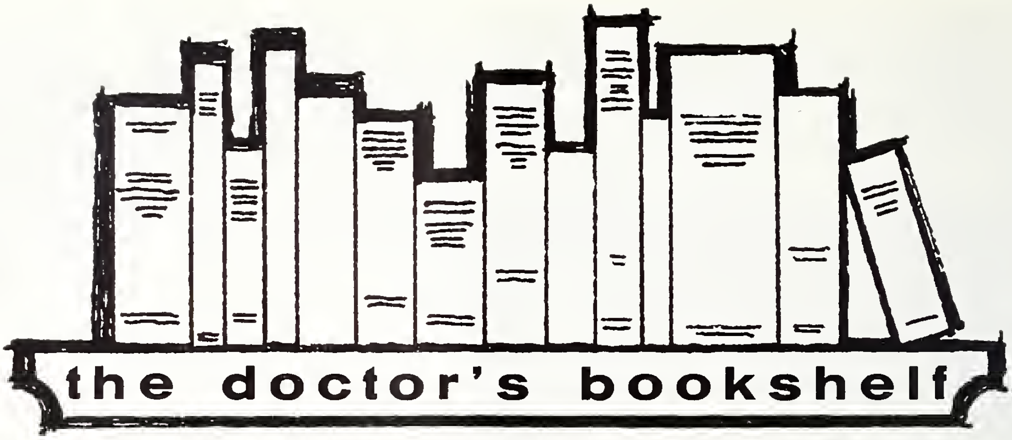

the doctor's bookshelf

BOOKS RECEIVED

History and Trends of Professional Nursing, by Deborah MacLurg Jensen, R.N., B.S., M.A., Associate Director, School of Nursing, St. Louis City Hospital, St. Louis, Mo. With a Unit on Legal Aspects of Nursing, by John F. Spalding, LL.B. Revised by Elwyn L. Cady, Jr., LL.B., B.S. Med., Medicolegal Consultant, Kansas City, Mo. The C. V. Mosby Company, St. Louis, 1959. Price $5.25.

An Atlas of Normal Radiographic Anatomy, by Isadore Meschan, M.D., Professor and Director, Department of Radiology, Bowman Gray School of Medicine of Wake Forest College, Winston-Salem, North Carolina; Consultant, Walter Reed Army Medical Center, Washington, D. C.; formerly Professor and Head of the Department of Radiology, University of Arkansas School of Medicine; with the assistance of R. M. F. Farrer-Meschan, M.D., Research Associate, Department of Radiology, Bowman Gray School of Medicine of Wake Forest College, Winston-Salem, North Carolina. Second Edition. W. B. Saunders Company, Philadelphia, 1959. Price $16.00.

Metabolic Care of the Surgical Patient, by Francis D. Moore, M.D., Moseley Professor of Surgery, Harvard Medical School; Surgeon-in-Chief, Peter Bent Brigham Hospital. Illustrated by Mildred Codding, M.A., Surgical Artist, Department of Surgery, Harvard Medical School, Peter Bent Brigham Hospital. W. B. Saunders Company, Philadelphia, 1959. Price $20.00.

The Plasma Proteins: Clinical Significance, by Paul G. Weil, M.D.C.M., Director, Transfusion Service and Assistant Physician, Royal Victoria Hospital; Lecturer in Medicine, McGill University; Consultant in Medicine, Queen Mary Veterans and Grace Dart Hospitals; Consultant in Transfusion, Queen Elizabeth and Royal Edward Laurentian Hospitals. J. B. Lippincott Company, Philadelphia, 1959. Price $3.50.

The first known treatise on nutritional anemia was published by Johannes Lange in 1554. Suggested therapy for anemic young females: marriage.

History of American Medicine, A Symposium, edited by Felix Marti-Ibanez, M.D., John B. Blake, John Duffy, Douglas Guthrie, Courtney R. Hall, Morris C. Leikind, Ralph H. Major, W. B. McDaniel, II, William Frederick Norwood, William Dosite Postell, Phyllis Allen Richmond, George Rosen, Norman Shaftel, Benjamin Spector. M.D. Publications, Inc., New York, 1959. Price $4.00.

Evaluation of the Pelvis in Obstetrics, by Charles M. Steer, M.D., Associate Professor of Clinical Obstetrics and Gynecology, College of Physicians and Surgeons, Columbia University, and the Sloane Hospital for Women. Second Edition. W. B. Saunders Company, Philadelphia and London, 1959. Price $4.00.

Synopsis of Ophthalmology, by William H. Havener, M.D., Professor and Chairman, Department of Ophthalmology, Ohio State Uni-

(Continued on page 663)

THE DOCTOR'S BOOKSHELF

(Continued from page 646)

versity; Member, Attending Staff, University Hospital, Dayton, Ohio; Member, Consulting Staff, Children's Hospital and Mt. Carmel Hospital, Columbus, Ohio. The C. V. Mosby Company, St. Louis, 1959. Price $6.75.

BIOPSY MANUAL, by James D. Hardy, M.D., Professor and Chairman of the Department of Surgery, University of Mississippi School of Medicine; James C. Griffin, Jr., M.D., Assistant Instructor in Surgery, Administrative Chief Resident in Surgery, National Cancer Institute Trainee, University of Mississippi School of Medicine; and Jorge A. Rodiguez, M.D., Assistant Professor of Surgical Anatomy, the Department of Surgery, University of Mississippi School of Medicine. The W. B. Saunders Company, Philadelphia and London, 1959. Price $6.50.

BOOK REVIEW

A TEXTBOOK OF MEDICINE. Edited by Russell L. Cecil, M.D., Sc.D., Professor of Clinical Medicine Emeritus, Cornell University; and Robert F. Loeb, M.D., Sc.D., D. Hon. Causa., LL.D., Bard Professor of Medicine, Columbia University. Associate Editors, Alexander B. Gutman, M.D., Ph.D., Professor of Medicine, Columbia University; Walsh McDermott, M.D., Livingston Farrand Professor of Public Health and Preventive Medicine, Cornell University; and Harold G. Wolff, M.D., Professor of Medicine (Neurology), Cornell University. Tenth Edition. W. B. Saunders Company, Philadelphia. 1959. Price $16.50.

The 10th edition of this well known and widely read treatise on medicine retains the quality and integrity of previous editions. Newer material that is given good coverage includes sections on the more recent advances in the field of virus disease and virology; on protein metabolism including agammaglobulinemia and electrophoretic patterns of blood proteins, macroglobulinemia, and cryoglobulinemia; and in the field of endocrinology including a good basic review section on steroid physiology and metabolism including a discussion of hyperaldosteronism. This most recent edition is highly recommended to all physicians. T. S. H.

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One out of six suicides has been seen by a doctor within 30 days; almost half have had care in the previous six months.

Capsule Clinics

- No significant correlation was observed between serum cholesterol level and weight or thickness of body fat. Thomas, C. B., and Garn, S. M., Science **131**:42, 1960.
- Bilateral oophorectomy prior to the natural menopause hastens the atherosclerotic processes. Robinson, R. W., et al., Arch. Int. Med. **104**:908, 1959.
- C-reactive protein determinations are of value in establishing the presence of infection in patients with acute nephritis and especially in the nephrotic syndrome, where hormone therapy may mask many signs of infection. Falyasevi, A., et al., Pediat. **25**:106, 1960.
- Children of two left-handed parents are not significantly more often left-handed than the children of right-handed parents. Falek, A., Am. J. Hum. Genet. **11**:52, 1959.

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WASHINGTON

Dr. Louis M. Orr, Orlando, Florida, President of the American Medical Association, issued the following statement May 5 on the Eisenhower Administration's medical care plan for the aged which was announced in Washington on May 4. Dr. Orr's complete statement in behalf of the American Medical Association follows:

"The administration proposal is based on the false premise that almost all persons over 65 need health care and cannot afford it. This is not a fact. The truth is that a majority of our older people are capable of continuing a happy, healthy and, in many cases, productive life. Of the more than 15 million persons in the nation over 65 years of age, only 15 per cent are on old age assistance. An undetermined number, although able to finance other costs, find it difficult to withstand the additional burden of the cost of illness.

"It is for these people that something should be done. Neither the Forand advocates nor the administration proposal are tailored to meet these problems.

"Here is AMA's positive eight point program for the health care of the aged:

"(1) The Needy Aged: These aged now receive health care through OAA programs. Here the need is for better organized medical care programs including improved preventive medical care.

"(2) The Near-needy: This is the group whose size is indeterminate, who can meet ordinary costs of living but cannot pay for health care costs. The AMA supports a state-administered program of federal grants-in-aid to the states for the liberalization of existing OAA programs so that the near-needy could be given health care without having to meet the present rigid requirements for indigency. A liberalized definition as determined locally would permit an expanded program and encompass the near-needy group.

"(3) Facilities: Better nursing home facilities for the long-term care of the aged person, especially those over the age of 75, are the most urgent health care need before the nation today. The average age of nursing home patients is 80, and their average duration of stay is two years. It is here that major improvement can be brought about. AMA supports federal programs for the provision of grants through the Hill-Burton mechanism to provide for new nursing home additions to existing hospitals. For proprietary nursing homes the AMA supported the recently enacted amendment to the federal housing act providing for government guaranteed mortgage loans to proprietary nursing homes. AMA is also cooperating with the American Nursing Home Association and the American Hospital Association in an effort to bring about a rapid improvement in medical care provided in nursing homes.

"(4) Voluntary Health Insurance: Health insurance and prepayment policies tailored to meet the needs of the aged for long-term nursing home care must be developed as rapidly as possible. Health insurers and the Blue Cross and Blue Shield plans across the nation are already experimenting in this new area of coverage.

"(5) Home Nursing Care: Care of the aged patient at home is psychologically, medically and financially desirable. Many programs to promote home nursing care are being developed. Homemakers' services also provide opportunities for children caring for aged mothers or fathers to continue gainful occupation. They need to be expanded.

"(6) Attitude Toward Aged: A basic change in attitude toward the aged person must be brought about. The person who reaches 65 has not suddenly become nonproductive and senescent. On the contrary, most persons over 65 are reasonably well and able to work. Increased productivity by eliminating compulsory retirement and permitting voluntary change of work is an essential part of the answer to the present problem.

"(7) Health Education: Many older persons are unaware of the need for continuing healthful nutrition and other practices that contribute to good health. Above all, the 'will to live' is essential to continuing health. Preventive medical measures instituted long before the age of 65 also can contribute materially to the promotion of good health after age 65.

"(8) The Purchasing Power of the Dollar: One of the principal economic problems of the aged person in the last twenty years has been the constant and continuing erosion of the purchasing power of his pension benefits. Any government program to help the aged must be anti-inflationary and maintain the purchasing power of fixed pension and annuity benefits.

"Sensible, economical health care programs for the aged that preserve freedom at the same time that they promote security must necessarily be limited to support for the needy aged and leave to voluntary, competitive, private enterprise those activities needed to improve the health care of the rest."

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...well tolerated when used on a properly individualized dosage schedule which does not induce excessive blood levels

"In many instances its effect has been dramatic and life saving..."[1]

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"...indeed, the results [with kanamycin] are the most remarkable ever achieved with otherwise fatal staphylococcal infections that we have ever seen."[3]

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SUPPLY: KANTREX Injection, 0.5 Gm. kanamycin (as sulfate) in vial containing 2 ml. volume. KANTREX Injection, 1.0 Gm. kanamycin (as sulfate) in vial containing 3 ml. volume.

REFERENCES: 1. Yow, E. M.: Practitioner 182:759, 1959. 2. Yow, M. D., and Womack, G. K.: Ann. N. Y. Acad. Sci. 76:363, 1958. 3. Bunn, P. A., Baltch, A., and Krajnyak, O.: Ibid. 76:109, 1958. 4. Council on Drugs, J.A.M.A. 172:699, 1960.

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Across
Missouri

CITIZENSHIP RESPONSIBILITY

The Citizenship Responsibility program of the Missouri State Chamber of Commerce continues to receive national recognition. *Missouri Business*, published by the State Chamber of Commerce, in the April issue, states:

"Long acclaimed nationally as one of the finest of all the many programs now in being aimed at increasing the activity and effectiveness of businessmen within the political parties of their choice, the State Chamber's Citizenship Responsibility Program received prominent and favorable mention last year and the year before in a number of nationally distributed publications. Now, with the publication of a new book on the subject of businessmen in politics, the State Chamber's Citizenship Responsibility Program has received prominent and favorable mention nationally once again.

"The new book is called 'Politics Is Your Business.' Written by William G. Baumer and Donald G. Herzberg, it is published by the Dial Press, of New York. A simply written, easy to understand 'how-to-do-it' book, 'Politics Is Your Business' eschews abstract political theory and concentrates on telling the members of the business community what steps they need to take to make themselves a force to be reckoned with in the intensely practical business of politics as it is carried on in both major political parties today. Timely, filled with useful examples of successful political activity by businessmen, corporations and business organizations, and written in a straightforward style, 'Politics Is Your Business' is a worthwhile addition to the fast growing body of literature whose aim is to impel businessmen to practical political action."

UNEMPLOYMENT COMPENSATION

A recently released annual report of the Missouri Division of Employment Security reveals that Missouri's experience rating system of collecting unemployment compensation taxes saved Missouri employers more than $45,168,500 in unemployment compensation taxes in the last fiscal year, and has saved more than $536 million since its inception.

EDUCATION

A study being made for the University of Missouri by Community Studies, Inc., shows that enrollment on the Columbia and Rolla Campuses has increased from 8,000 in 1952 to 13,000 in 1960. The study gives the prediction that by 1965 the enrollment will be 20,000 and by 1975 will be 35,000.

RABIES

The Division of Health has reported that there were 69 laboratory confirmed cases of rabies in the first three months of 1960.

CHANGE IN WORKERS

The Missouri Division of Employment Security reports that during the last decade professional, office and sales workers exceeded, for the first time in history, the number of persons employed in manual occupations and says that during the coming decade this trend will continue. It predicts that the fastest growth will occur among professional and technical occupations, especially engineers, scientists and technicians.

The Division further predicts that the rate of growth of industries will be led by construction, finance, insurance and real estate, these being expected to grow by 30 per cent or more. The causes are given as the growing number of households, the increasing expenditures for schools and highways and the rising volume of business activity.

Schaffer's Diseases of the Newborn

Here is richly detailed and immediately usable help on the recognition and management of diseases, disorders and anomalies of the newborn child. Dr. Schaffer pays full attention to *both common and uncommon* diseases. The book's 358 vivid illustrations make up a virtual atlas of neonatal pathology.

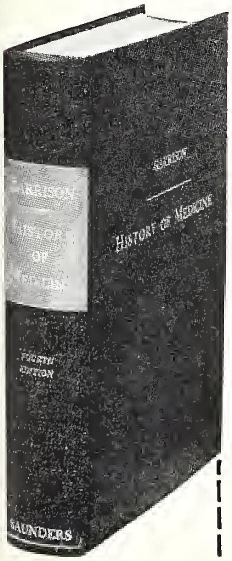
The physical examination which should be performed on all newborn children is described in meticulous detail. Special attention is given to signs and symptoms, definite or questionable, which may indicate the presence of disease. Common and puzzling signs such as dyspnea, cyanosis, jaundice and diarrhea are thoroughly discussed with thoughtful investigation of differentiating features. Case histories are frequently cited.

Sound advice is given on etiology, pathology, clinical course, diagnosis, treatment and prognosis of such disorders as: atelectasis, congenital diaphragmatic hernia, aortic stenosis, meconium ileus, omphalocele, undescended testicle, acute pyelonephritis, etc. Inborn errors of metabolism, disorders of the blood, the eye, the skin, and the endocrine system are all well covered.

By ALEXANDER J. SCHAFFER, M.D., Associate Professor of Pediatrics, The Johns Hopkins Medical School and Pediatrician to The Johns Hopkins Hospital. With the assistance of MILTON MARKOWITZ, M.D. About 1078 pages, 6½" x 10", with 358 illustrations, some in color. About $20.00. *New—Ready in June!*

Special Reprint!—Garrison's History of Medicine

You'll find this classic work an intriguing addition to your library. A special limited edition of the *Fourth Edition (published in 1929)* has just come off press. Although the book has been out of print for nearly 15 years, copies of it have constantly been sought after. *The Journal of the American Medical Association* said of it: "Compact and crowded with facts, but pleasant reading throughout, clear and concise, rich in happy phrases, apt quotations, with occasional flashes of humor, and many historical and cultural allusions."



By the late FIELDING H. GARRISON, M.D., formerly Lieutenant-Colonel, Medical Corps, U.S. Army, Surgeon General's Office, Washington, D.C. 996 pages, 6" x 9", with numerous portraits, many rare. $13.50. *Reprint of Fourth Edition!*

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Two New Books!

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Here is an up-to-the-minute and practical guide to what you *can* and *should* do for your patients with edema. It presents all the useful information to come out of the Symposium on Salt and Water Retention held at Hahnemann Medical College this past December.

123 authorities tell you what they have learned about the mechanisms and management of edema. Immediately usable help is given on the treatment of edema associated with such problems as: hypertension, pregnancy and premenstrual tension, renal disorders, liver disease, and congestive heart failure.

Latest advances in the use of diuretics are carefully considered: xanthine diuretics, mercurial diuretics, triazine compounds, thiazide derivatives, antialdosterone agents and steroids, etc.

Edited by JOHN H. MOYER, M.D., Professor and Chairman of the Department of Medicine; and MORTON FUCHS, M.D., Assistant Professor of Medicine, Hahnemann Medical College and Hospital. 883 pages, 6½" x 9¾", with 286 illustrations. About $15.00. *New—Just Ready!*

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Name ________________________________

Address ________________________________

JOHN F. PEARL, M.D.

Missouri Academy of General Practice

Off to Springfield for June 26.

A real treat will be served to physicians and their wives at the Holiday Inn in Springfield, Mo., on Sunday, June 26. A full one-half day symposium on clinical medicine and surgery with outstanding speakers from all over the United States is offered free for the taking to Missouri physicians.

This cardinal occasion is jointly sponsored by the Southwest Missouri Chapter of the Missouri Academy of General Practice, the Greene County Medical Society and Lederle Laboratories. The scientific program begins with a luncheon at 12:30 p.m. and will continue throughout the afternoon concluding at 5:30 p.m. The luncheon at noon and a cocktail party from 5:30 to 6:30 p.m. are free to doctors and their wives, compliments of Lederle Laboratories. The scientific program includes the following presentations:

The luncheon speaker will be Edward M. Litin, M.D., Consultant, Section of Psychiatry, Mayo Clinic, Rochester, Minnesota. His subject will be, "The Spoiled Brat—The Problem Parent."

Dr. Walter W. Tillman, Jr., Springfield, President of the Greene County Medical Society, will serve as luncheon chairman.

The afternoon program will be moderated by Dr. William T. McNew, Carthage, President, Southwest Missouri Chapter of the Missouri Academy of General Practice.

"What Is This Rash?" E. Newton Hesbacher, M.D., Danville, Pa.

"Management of 'The Virus,'" John P. Utz, M.D., Bethesda, Md.

"Gynecologic Problems in the Adolescent," Goodrich C. Schauffler, M.D., Portland, Oregon.

"The Treatment of Traumatic Wounds," William Requarth, M.D., Decatur, Ill.

This program is acceptable for four hours of Category I PG Credit for Academy members. There will be special activities arranged for the doctors' wives which will be under the direction of Mrs. Michael J. (Kathryn) Clarke, Springfield, President of the Women's Auxiliary to the Greene County Medical Society.

Southwest Missouri doctors expect this to be one of their finest meetings. All members of the Missouri State Medical Association are invited. Have you ever been to Southwest Missouri in June? Keep in mind that this attractive occasion begins with a free luncheon at 12:30 p.m.

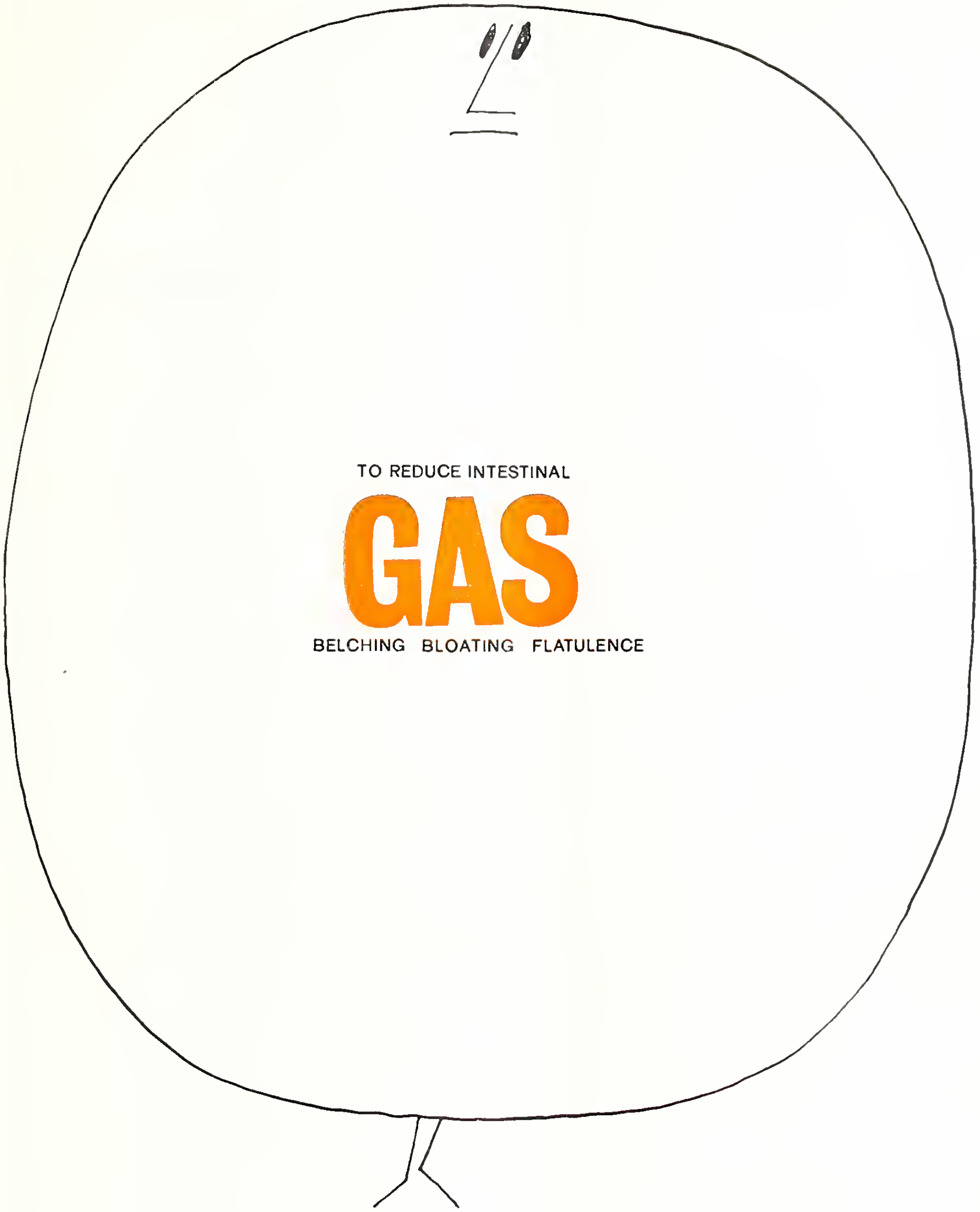
Have you marked your calendar for Saturday and Sunday, November 5 and 6, 1960? These are the dates of the 12th Annual Scientific Assembly of the Missouri Academy of General Practice. This unique two day session will be held at the Chase Hotel in St. Louis and will offer an unusually strong program this year. Take our word for this now and set aside these dates, and when you see the program at a later date, we are confident you will agree we steered you right. Watch this page in months to come for additional highlights on the November 5-6 assembly.

SCIENTIFIC EXHIBITS

Application forms for space in the Scientific Exhibit at the Washington, D. C., Clinical Meeting of the American Medical Association, November 28 to December 1 are now available. They may be procured by writing directly to Charles H. Bramlitt, M.D., Director, Department of Scientific Assembly, American Medical Association, 535 N. Dearborn St., Chicago 10, Illinois. Applications close on August 1.

The "Hull" award will be presented for the first time at this meeting to the best exhibit on a scientific subject which has not been previously shown at a medical meeting. The award will consist of a gold medal and an honorarium of $250. The winning exhibit will be approved for showing in the Scientific Exhibit at the 1961 Annual Meeting of the AMA which will be held in New York City.

Dr. Thomas G. Hull will personally present the award to the recipient.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Woman's Auxiliary

"The stuff dreams are made of" is a popular theme of poets, artists and musical composers. What are the dreams of a state Auxiliary President made of? She will tell you.

Mrs. Jordan Kelling

Her dreams are shocking because they are so grand. First of all, she dreams that she is the kind of President to whom the County Auxiliaries write or telephone for information, and that she is always ready to supply that information, or refer them to the proper source. She dreams that there is perfect liaison between county groups, directors, officers and chairmen; the organization plan for the state is good, and can be effective if used to full advantage.

She dreams that all members are availing themselves of the great material available at National, and are getting the material before the public. She dreams that individual members are taking individual responsibility to show films dealing with Civil Defense, Mental Health, Problems of the Aging, Safety at Home and on the Highway, Recruitment for the allied medical careers to the adults and students of their communities.

She dreams that, since a certain amount of time allotted to radio and TV stations must be used for public service and education, in every town where there are such stations our material will be put on the air.

She dreams that all Auxiliaries are making efforts to increase their A.M.E.F. contributions, and imagines the great use to which the Memorial Cards, and the Appreciation Cards are put to make valuable contributions to medical schools by this plan. She thinks of the benefit affairs being arranged to further this cause, and, best of all, she dreams of the members' reaching down into their own pockets to make outright gifts.

One of her happiest dreams is of the honors bestowed on our wonderful doctors for Doctor's Day, and she envisions the lively newspaper accounts of the methods for bestowing such honors. As a matter of fact, she likes to think that all the worthwhile endeavors the Auxiliaries make for their communities are fully described in the local papers.

She dreams of all members not only subscribing to, but reading, the *National Bulletin,* and of the interest they take in all that is reported in this little magazine which costs only 25 cents per copy, and takes about as much time and money to read as the Sunday paper.

She dreams that Auxiliary members are attending their regional Conference on Aging, held in connection with the White House Conference on Aging, to be held in Washington in 1961. She hopes that they are working in their own communities to solve the problems of the aged which exist, and that they are gathering the pertinent information on solutions to the problems in each community so that the information can be passed on to the A.M.A. which stands in urgent need of such facts.

In every High School in Missouri, no matter how small, she dreams that the film, "Helping Hands for Julie," is shown in the interest of recruiting the "helping hands" so needed by our beloved doctors; and a vision of new Future Nurses' Clubs and Medical Careers Clubs, organized in the schools, dances through her head.

She dreams that the Auxiliaries are helping to pull poor Missouri up into a place in the sun in mental health. She dreams that the membership grows by leaps and bounds until finally, by having a membership matched with that of the Missouri State Medical Association, a solid front will be presented to the world. She dreams of a members-at-large list that grows to magnificent proportions, with plans being laid for forming Auxiliaries in unorganized areas. And, she dreams that the tremendous educational program being launched in PROJECT 60, about which all county groups have been informed, is a gratifying success.

An old song goes, "I'm a Dreamer, Aren't we All?" Yes, your state President is a dreamer, and so are all the County Auxiliaries; and, since it is always fun to help people's dreams come true, let's help each other to do just that.

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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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HURLEY L. MOTLEY, M.D., *Los Angeles, Calif.*

Pulmonary Emphysema

Emphysema is described as a disabling disease with its incidence increasing. Its clinical and physiologic features are outlined and methods of diagnosis and treatment are discussed.

Dr. Motley is Professor of Medicine and Director of the Cardio-Respiratory Laboratory, University of Southern California School of Medicine, Los Angeles, Calif.

This paper was presented at the 102nd annual session of the Missouri State Medical Association, March 15, 1960, in St. Louis.

The work was supported in part by Research Grant H-1604-C5, United States Public Health Service.

ETIOLOGY

EMPHYSEMA is the most common chronic lung disease at the present time, more frequent than tuberculosis, asthma or lung cancer. It is a major cause of disability and the incidence appears to be increasing. Emphysema is a slowly progressive disease and the diagnosis is frequently not made until late in the course of the affliction. The individual frequently dates the onset of symptoms for emphysema to a recent acute illness such as a severe cold or pneumonia. This error is due to the large breathing reserve normally present in the lungs and the magnitude of the changes necessary to reduce this reserve sufficiently to produce dyspnea with exertion. Many individuals do fairly well for the ordinary activities of life with one good lung following a pneumonectomy.

Although emphysema may be found in all age groups, it is more often present after the age of 45 years and frequently is associated with chronic bronchitis. In some patients it occurs with asthma of long standing, and occasionally may be present after a few years, as seen in this laboratory in a 10 year old boy with severe emphysema and a history of asthma since the age of 1. However, not all asthmatic patients develop emphysema. Emphysema is common in pneumoconiosis and may follow tuberculosis, especially in those cases treated before the antibiotic era, when pneumothorax was frequently employed for long periods. Emphysema occurs in many individuals in whom there is no specific cause known at the present time, the so-called idiopathic emphysema. Most individuals with idiopathic emphysema have a history of heavy cigarette smoking over a long period of time. A past history of pneumonia is often present, occurring before the advent of the chemotherapeutic and antibiotic era. Emphysema occurs in cystic fibrosis even in young children. Air pollution has been considered a factor in the same category as cigarette smoking (also a form of air pollution).

CLINICAL FEATURES

There are clinical features of emphysema which are characteristic. Even in the most severe emphysema, in the absence of right heart failure, the individual can usually sleep flat, more often on one side and using only one pillow or none. The total vital capacity tends to be greater supine than standing. This is opposite to the cardiac patient in whom the vital capacity supine is frequently significantly lower than in the standing position. The shape of the chest, the anterior-posterior diameter of the chest, the ratio of lateral to anterio-posterior diameter, or chest expansion without relation to time have been found unrealible in trying to evaluate the severity of emphysema. Breath holding time is also an unreliable test. Distant breath sounds associated with the inability to increase the breath sounds by rapid forceful breathing is a significant physical finding typical of severe emphysema. The occurrence of peptic ulcers is fairly commonly associated with severe emphysema. Although fluoroscopy is a most useful procedure in diagnosis, there are limitations in the use of the chest roentgenogram, especially for the early diagnosis of emphysema.[1]

IMPORTANCE AS DISEASE ENTITY

Emphysema is an important cause of death as recorded on death certificates in the State of California. A study over an eight year period, 1950 to 1958, reveals an increasing incidence of emphysema as the cause of death and stands second only to heart disease at the present time.[2] Actually the increase has been rather abrupt since 1950, when the rate was 1.5 per hundred thousand as compared to 6.3 per hundred thousand in 1958. The increase in the death rate as recorded on the death certificate[2] is shown in fig. 1. A similar increase was noted for Los Angeles County and also for the United States as a whole. The cause of this abrupt increase is not clear at the present time, although air pollution and cigarette smoking have been implicated as factors. The increase in the incidence of emphysema in England has been much greater than in the United States and air pollution is a more serious problem there. The fact that people are living longer at the present time by virtue of chemotherapy, antibiotics and better diagnoses may contribute to the increasing emphysema in the older age groups.

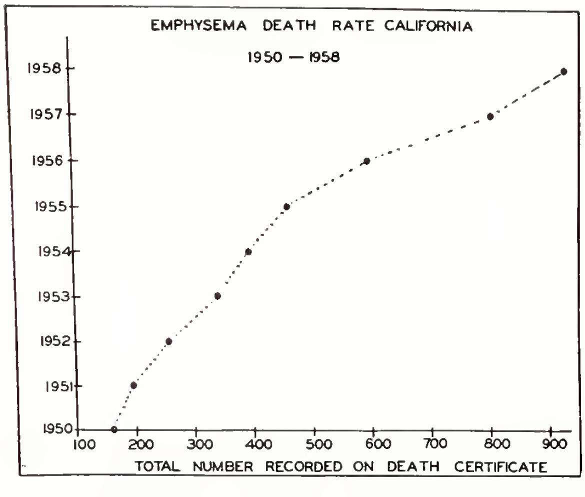

Fig. 1. Emphysema deaths in California as recorded by the physician. The data were obtained by the California State Department of Public Health.[2] Note the marked rise in the number of deaths from emphysema over the eight year period.

An analysis was made of one group of cases studied in our laboratory in 1959, a total of 606 individuals who had applied for social security benefits with an average age of 58 years. There was no selection of this group of cases by our laboratory. They were referred for a pulmonary function evaluation because they presented certain clinical symptoms, of which dyspnea was the most common. Emphysema of a significant degree was present in 60 per cent of this group, of which 87 per cent were men and 13 per cent women. On the other hand, 103 individuals of this group had pulmonary fibrosis as the primary significant factor, associated in some cases with emphysema and in others none. In the fibrosis group, 66 per cent were men and 34 per cent women. It was also of interest that in the group of 606 cases studied, 27 had normal measurements, and some of these had been diagnosed clinically as emphysema. Sometimes the error was made in interpreting shortness of breath as an indication of heart trouble, but the treatment of bed rest, digitalis, diuretics and low sodium diet was unsuccessful. There was a miscellaneous group of 114 cases or 18.8 per cent of the total number of 606 who were cardiac cases, had had resections of one or more lung lobes or a pneumonectomy, thoracoplasty or slight emphysema. Although emphysema is primarily a disease of men, it does occur in women and in some to a severe degree. Fibrosis occurred more commonly in women than did emphysema as shown by the figures in this study in which out of 362 cases of significant emphysema studied, there were 46 women (13 per cent) as compared to 35 women (34 per cent) with significant fibrosis in the group of 103 (table 1). The changes in the lung volume measurements for the emphysema and fibrosis cases of this large group of social security applicants are presented in figure 2.

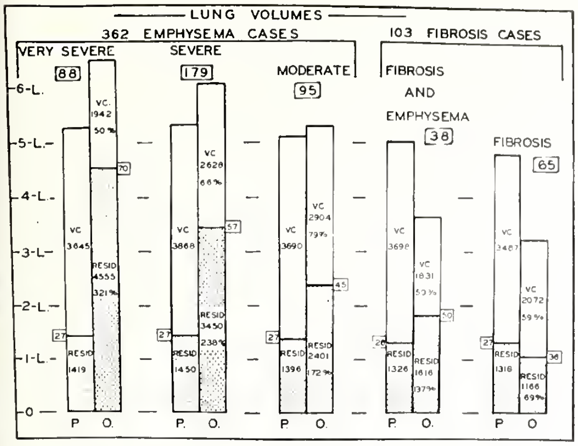

Fig. 2. Lung volume measurements in 362 emphysema and 103 fibrosis cases from a group of 606 Social Security applicants studied in this laboratory in 1959. The average predicted (P) values for vital capacity (VC) and residual air (Resid.) are shown to the left of each of the five groups, based on age, sex and height. The observed (O) measurements for VC and Resid. are shown on the right side of each of the five columns. The residual air was more than 300 per cent of predicted (average 321) in all 88 of the severe emphysema subjects, and the ratio of residual to total lung capacity above 65 per cent (average 70). The residual air was more than 200 per cent of predicted (average 238) and the ratio of residual to total lung capacity above 50 per cent (average 57) in all 179 of the severe emphysema subjects. The timed vital capacity and maximal breathing capacity were markedly decreased, and exhalation time was markedly prolonged in the severe and very severe emphysema groups. The marked decrease in total lung capacity (VC + Resid.) was the striking finding in the two fibrosis groups. There were 65 cases of fibrosis with no emphysema, as the residual air was decreased, intrapulmonary mixing was normal and exhalation was rapid and without obstruction. In 38 cases of predominantly fibrosis, emphysema was present in a slight to significant degree. Note the wide range of residual air changes.

PATHOLOGIC PHYSIOLOGY

Pulmonary emphysema, as the term is generally used clinically, refers to an over-inflation or distention of the lung (localized or diffuse), characterized by a relative increase in the amount of air which cannot be blown out with a forced exhalation. This air which cannot be blown out of the lung with a forced exhalation is referred to as residual air. The residual air plus the vital capacity (VC) equals the total lung capacity (TLC) for the individual, and in pulmonary emphysema the TLC value may be normal, increased or decreased with respect to the predicted value. In pulmonary emphysema the residual air is increased and in some cases to a marked extent, more than 400 per cent or more of the predicted value (figure 2).

The measurement of the absolute volume of the residual air and the ratio of the residual air to total lung capacity constitutes two of the most important measurements in the over-all evaluation of the severity of emphysema in a given case. Other factors considered include measurements of air distribution in the lung and spirometric measurements of timed vital capacity, maximal breathing capacity and the shape of the spirogram tracings. The 13.5 liter Collins Respirometer* with three speeds is most useful for obtaining spirograms of total vital capacity, the timed vital capacity for one or three seconds and the maximal breathing capacity. The total vital capacity may be normal or decreased in various

TABLE 1

INCIDENCE OF PULMONARY EMPHYSEMA AND FIBROSIS IN 606 SOCIAL SECURITY CASES STUDIED IN 1959

I. EMPHYSEMA
  A. Significant Degree—362 Cases or 59.7 Per Cent of Total Number Studied.
    1. Very Severe—88 Cases (77 Men and 11 Women).
    2. Severe—179 Cases (159 Men and 20 Women).
    3. Moderate—95 Cases (80 Men and 15 Women).
  B. Distribution.
    1. Men, 316 Cases—87 Per Cent Emphysema Group.
    2. Women, 46 Cases—13 Per Cent of Emphysema Group.
II. FIBROSIS
  A. Significant Degree—103 Cases or 17 Per Cent of Total Number Studied.
    1. Fibrosis With no Emphysema—65 Cases (41 Men and 24 Women).
    2. Fibrosis With Some Associated Emphysema (27 Men and 11 Women).
  B. Distribution.
    1. Men, 68 Cases—66 Per Cent of Fibrosis Group.
    2. Women, 35 Cases—34 Per Cent of Fibrosis Group.
III. NORMALS—27 Cases or 4.5 Per Cent of Total Number Studied.
  A. Men, 23 Cases or 85 Per Cent of Normal Group.
  B. Women, 4 Cases or 15 Per Cent of Normal Group.
IV. MISCELLANEOUS (Cardiacs, Resection of Lobe or Lung, Thoracoplasty or Slight Emphysema)—114 Cases or 18.8 Per Cent of Total Number Studied.
  A. Men, 92 Cases or 81 Per Cent of Miscellaneous Group.
  B. Women, 22 Cases or 19 Per Cent of Miscellaneous Group.

degrees. The timed vital capacity for three seconds is decreased as compared to the total vital capacity in emphysema, but usually not as much as the maximal breathing capacity with respect to predicted normal. The timed vital capacity for one second is decreased more on a percentage basis than the three second, but again usually not as much as the maximal breathing capacity. Maximal peak flow rates are markedly decreased in severe emphysema as measured on the Wright peak flow meter.[3] No one single test is adequate, but the spirogram measurements are useful for screening.

The use of a simplified helium dilution test greatly simplifies the residual air measurement.[4] This method is quite accurate and can be performed quickly and no gas analyses are required at the time. The helium method for measuring residual air checks closely with the oxygen open circuit method. We routinely use both methods on each patient as checks when performing complete pulmonary function studies, and also to obtain the nitrogen washout curve with the oxygen open circuit method. The nitrogen washout obtained with the oxygen open circuit method employing a nitrogen meter appears to be the best way of accurately assessing air distribution in the lung.[5] In cases of severe emphysema 15 to 20 minutes or longer are required on oxygen breathing to wash out the pulmonary nitrogen, and this test gives a graphic demonstration of the extent to which the obstruction element is present in many of the smallest respiratory air passageways.[3]

In emphysema hyperventilation is a compensatory mechanism which attempts to maintain the mean alveolar pO_2 as near the normal level as possible and also to blow off CO_2 to maintain a normal level. Hyperventilation may be adequate compensation at rest, if the emphysema is not too severe, but with exercise even maximum hyperventilation is frequently inadequate to provide sufficient alveolar aeration. Pathologic changes in the lung resulting in the increased volume of the residual air and the increased ratio of residual air to total lung capacity results in extensive disturbances in the uniformity of air distribution in the lung. Impaired air distribution results in hypoventilation of many alveoli, and an elevated alveolar nitrogen value above the normal 1.5 per cent after breathing oxygen for seven minutes. The use of a slight positive pressure to assist inspiration increases air flow and aeration of the poorly ventilated alveoli, and improves the arterial blood oxygen saturation because the blood, perfusing the capillaries in relation to the poorly ventilated alveoli, is exposed to a more nearly normal oxygen tension with this pressure breathing.[6] Bronchospasm is a frequent complication in emphysema that impairs still more the disturbance in the uniformity of air distribution in the alveoli.

The arterial blood oxygen saturation varies widely in pulmonary emphysema, both at rest and with exercise. In most cases at rest the arterial saturation is above 90 per cent, but with a slight exertion, such as stepping up and down for one minute on an eight inch stool, the saturation may decrease 10 per cent or more. The more marked the decrease in saturation with exercise, the more severe the disturbance. At rest the blood tends to flow through the better perfused and ventilated areas of the lung, whereas with exercise or a slight exertion the increased cardiac output results in blood flow through less well ventilated and perfused areas as well. The primary factors in emphysema reducing the arterial blood oxygen saturation is the perfusion of blood through poorly ventilated areas (alveoli poorly ventilated) and to the perfusion of blood through non-ventilated areas (fibrotic areas) of the lung at or near the alveolar level. The use of high levels of oxygen breathing (32 to 40 per cent oxygen) which increases the inspired pO_2 from 70 to 125 mm. Hg. does not correct the unsaturation due to perfusion of blood through non-ventilated areas.[7] The presence of an alveolar-capillary membrane block has not been found to be a primary significant factor in pulmonary emphysema. The disturbance on the other hand is directly related to ventilation-perfusion abnormalities.

Elevation of the carbon dioxide content of the arterial blood indicates the presence of inadequate alveolar ventilation (alveolar hypoventilation) and that the individual is having difficulty getting rid of the carbon dioxide. Almost as much carbon dioxide is formed in the body per minute as oxygen is used, and the only way this volume of carbon dioxide can be blown off adequately is by the lungs. The emphysematous individual may have compensated for the increase in CO_2, as this change may have occurred slowly over a long period of time, and the arterial blood pH will be in the normal range (7.40-7.45). On the other hand, one cannot be sure of the absence of respiratory acidosis in the presence of increased CO_2 unless the arterial blood pH is measured, for a lowered pH may be present, indicating the presence of acidosis.[8] Calculated

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* Warren E. Collins Co., Boston, Mass.

pH values from the CO_2 combining power are unreliable. Patients with severe pulmonary emphysema may develop acute respiratory acidosis in the presence of extensive infection of the lung, atelectasis or pneumonia. Even in a normal individual, if the pneumonia is severe enough, respiratory acidosis can occur. The use of oxygen breathing at ambient pressures with a mask or catheter in severe emphysema in the presence of hypoxia and hypercapnia may result in the development of acute respiratory acidosis in a matter of hours. This is due to the decrease in ventilation so that less carbon dioxide is blown off, although clinically the patient may appear satisfactory as the breathing is easy and the color good. A common error in diagnosis of coma of acute respiratory acidosis is to explain the symptoms as resultant from cerebrovascular accident. An arterial pH eliminates this error of diagnosis and may be life saving.[8]

RESPIRATORY ACIDOSIS

Acute respiratory acidosis is an extremely common condition occurring in hospitals all over the country with patients dying and the condition going unrecognized. At the postmortem examination the pathologist does not make the diagnosis, as there are no characteristic findings. The diagnosis must be made during life and the arterial blood pH is the easiest and simpliest procedure. Unfortunately in the differential diagnosis of coma, acute respiratory acidosis is usually omitted, even on teaching medical services. One should consider the possibility of this condition when a patient has difficult breathing, becomes delirious, or comatose, especially after the administration of oxygen or a respiratory depressant drug.

Respirations may be depressed by a high diaphram pushed up by abdominal ascites or extensive pneumonia in an otherwise healthy individual. We studied one patient only 40 years old with extensive virus pneumonia, and without emphysema, who developed respiratory acidosis, severe hypoxia (69 per cent arterial oxygen saturation on air breathing) and peripheral vascular collapse. A tracheotomy with continuous positive pressure breathing was required to maintain adequate alveolar aeration, and this was checked by the arterial pH. It is not commonly recognized that an anatomically normal individual may develop acidosis with severe pneumonia and it would have been missed in this case if the pH had not been measured. A severe emphysematous patient is a good candidate to develop respiratory acidosis during recovery from a fracture, especially of a hip or other immobilizing type. The course is often insidious starting with a chest cold which develops pneumonitis and fever and then cyanosis may be present; oxygen is given by mask or cannula and the patient becomes restless or agitated and then, following a sedative such as phenobarbital, morphine or demerol, disorientation and coma follow. Death can result unless the condition is promptly recognized and treated.

Hypoxia and cyanosis result from a low arterial blood oxygen saturation and a low arterial pO_2 stimulates the carotid body augmenting the respiratory drive from the respiratory center (Hering-Breuer Reflex) to increase ventilation. When oxygen is given the carotid body reflex is abolished and ventilation decreases, and less CO_2 is blown off, with the result CO_2 increases in the blood forming carbonic acid which in turn increases the hydrogen ions and acidosis is the result. The level of the pCO_2 of the blood is a function of alveolar ventilation, and the many poorly ventilated alveoli in emphysema contribute little to CO_2 elimination. It has already been pointed out that in some cases the pulmonary nitrogen is not washed out even after 20 minutes on 100 per cent oxygen breathing.

Another significant factor is the partial loss of sensitivity of the respiratory center to increases in CO_2 in the blood by the emphysema patient. In the normal individual CO_2 stimulates the respiratory center directly to increase pulmonary ventilation, in rate and depth or both, to blow off the excess CO_2. This response is lacking in severe emphysema. Respiratory depressant drugs, such as the barbiturates and the opiate group, depress the respiratory center still more decreasing pulmonary ventilation, which may already be at the critical level, and thus precipitate acute respiratory acidosis. The oxygen breathing indirectly results in coma at ambient pressures because of the decreased ventilation allowing the CO_2 to accumulate. The actual culprit is the CO_2 from the body metabolism. If the ventilation is maintained mechanically in an adequate manner by intermittent positive pressure breathing (IPPB) apparatus or the iron lung, respiratory acidosis does not develop on oxygen breathing. Many of these patients need oxygen badly and oxygen can be given safely if some mechanical respiratory assistance is used. In some cases a tracheotomy is required temporarily to provide adequate alveolar ventilation, in the presence of pneumonia or pneumonitis. The use of 40 per cent oxygen and 60 per cent helium is helpful with IPPB when CO_2 elimination is a problem and respiratory acidosis is present. Intravenous injection of sodium bicorbonate may be required if the arterial pH drops to 7.2 or lower in order to return the pH to a safe range as quickly as possible. We have found the arterial pH much better correlated with the mental status of the patient than the CO_2 content, CO_2 combining power or the pCO_2.

PULMONARY VASCULAR RESISTANCE

The decreased surface area for gas exchange because of obliteration of capillaries and alveoli in emphysema limits the expansibility of the pulmonary vascular bed with exercise. If the blood flow is reduced the oxygen taken up from the lungs by the blood is correspondingly decreased. This can be measured by the oxygen uptake, during exercise, such as stepping up and down on an eight inch stool for one minute. This one minute step up test is a mild exercise and not designed as a test of physical fitness, rather a test of pulmonary function. The step up test normally increases the oxygen uptake three to four times above the resting oxygen uptake level. In order to extract oxygen from the air breathed in and out of the lung, the pulmonary blood flow must be increased. In emphysema the expansibility of the pulmonary vascular bed is impaired, and many of these patients are unable to increase their cardiac output much above the resting level. In some cases from one to three liters may be maximum. If a more severe exercise than the step up test is given, the patient will simply fatigue quicker.

The carbon monoxide diffusing capacity measurement is low in emphysema, primarily because the obliteration of functioning capillaries and alveoli decrease the surface area for gas exchange. There is no correlation of the low diffusing capacity for carbon monoxide with an alveolar-capillary membrane block in emphysema. The CO test is helpful in disability evaluation in emphysema because of rather sharp dividing lines in the measurements between the normal and severe emphysema, both at rest and with step up exercise (figure 3).

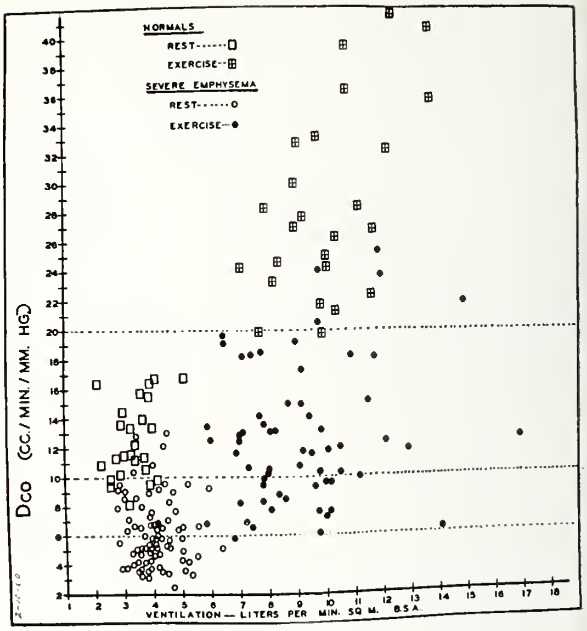

Fig. 3. Correlation of the supine rest and step-up exercise carbon monoxide (CO) diffusion capacity measurement[11] (DCO) on the ordinate and the minute ventilation in liters per minute per Sq. M. body surface area on the abscissa in normal and emphysema subjects. There were 25 subjects with essentially normal lung volume measurements and 79 subjects with severe or very severe emphysema. The normal subjects are represented by squares, open for rest and with crossed lines for exercise. The open circles represent the emphysema cases for rest and the solid circles for exercise. The DCO values obtained on the normals were 10 to 17 at rest and 20 to 40 for exercise, while for the emphysema cases the resting values were 3 to 10, and 6 to 20 for exercise. The data reveal rather sharp separation for the normal and emphysema groups, both at rest and with exercise. The marked decrease in the DCO in emphysema reflects primarily the decreased surface area for gas exchange in the lungs, and not the presence of an alveolar-capillary membrane block.

SUMMARY OF PHYSIOLOGIC CHANGES

In summary, in pulmonary emphysema three main factors are significantly altered. First, on the ventilatory side there is an inability to adequately get air down to the alveolar level so as to get oxygen in and to blow off carbon dioxide. Second, interference exists for the transfer of oxygen and carbon dioxide in the lung. The oxygen transfer defect is primarily due to a lowered alveolar pO_2 in the poorly ventilated alveoli, and to the perfusion of blood through non-ventilated, fibrotic or atelectatic areas of the lung, especially with exercise. Excessive retention of carbon dioxide is a late manifestation and, when present, indicates severe emphysema or associated infection of the lung in the presence of the diminished breathing reserve of emphysema. Third, the inability to expand the pulmonary vascular bed and the presence of increased pulmonary vascular resistance with an increased load on the right side of the heart causes development of pulmonary heart disease (cor pulmonale). The pulmonary blood flow cannot be increased in a normal manner and the exercise oxygen uptake is low.

TREATMENT

A basic principle of treatment in emphysema is to provide an adequate bronchiolar airway. Ventilation through the airway may be impaired by bronchospasm, edema of the wall, infection and retained secretions. The infection is treated with antibiotics, and one of the best ways to administer the antibiotic is by nebulization as an aerosol. Bronchospasm is treated with bronchodilators and, in addition to the adrenergic group, aminophylline is a potent bronchodilator when given rectally or intravenously. Intermittent positive pressure breathing (IPPB) is a most effective method of administering the adrenergic group (Isuprel, Vaponefrin, Aerolone) of bronchodilators and antibiotics. The slight positive pressure applied on inspiration helps carry the medication down into the obstructed air passage, beyond the secretions and mucous plugs into the terminal air passages where the most good can be accomplished. The elimination of retained secretions is an important problem in the treatment of emphysema, and this can be helped by liquefying the secretions by the liberal use of fluids, preferably by mouth, but if necessary parenterally. The recent use of main stream nebulization with large heated nebulizers* in conjunction with the IPPB apparatus or power type nebulizers is a valuable aid to help prevent drying out of the secretions. The retention of secretions promotes infection. Expectorants such as iodides help liquefy secretions.

The use of 60 per cent helium and 40 per cent oxygen with the IPPB has proven most useful in many cases in distributing more uniformly the medication down to the markedly restricted air passages, which may be almost completely obstructed. Unless air or a gas gets beyond the partially obstructed airways, the patient cannot cough up the material. Helium being a small molecule and highly diffusible is extremely valuable in carrying bronchodilators and other medicaments down to the obstructed areas.[9] If the patient does not raise the secretions, assistance may be provided by using a catheter and actually sucking out the secretions from the trachea and major bronchi.

Trachea catheterization is an extremely useful method for removal of secretions from the tracheo-bronchial tree. We have found the Bennett Model PR-1-A* respiration unit useful in treating severe infections in emphysema cases requiring respiratory assistance for several days in order to provide an adequate alveolar aeration. The Bennett unit can be used continuously with a tracheotomy tube and, when equipped with the large main stream heated nebulizer unit, drying of secretions is avoided. This apparatus will ventilate small passages and still tolerate gross leaks in the patient's breathing system. It will function automatically, or permit the patient to take over at will with his own respiratory pattern. Before the automatic unit was available, in a number of seriously ill cases it was necessary for someone to trip the Bennett cycling valve for many hours, as the patient was not breathing enough on his own effort to trip the mechanism. Since the automatic unit has been available it has not been necessary to put a patient in the iron lung, a big help from the standpoint of care of the patient and the decreased cost of the hospital care.

The long range treatment of emphysema should try to prevent further progression of the increase in residual air, to reduce complications and to make the most effective use of the remaining lung tissue. Irritation of the bronchial mucosa by air pollution, either the present day smog or tobacco smoke should be avoided. The use of IPPB[10] with bronchodilators has been most valuable in our experience. The only way the patient can obtain the maximal possible benefits is to have a pressure breathing unit for use at home, where two to four treatments of 15 to 20 minutes can be taken every day for an indefinite period of time. The emphysema patient cannot be cured, but the progression of the condition may be slowed or halted. Living becomes more comfortable and some patients have been able to return to work. The IPPB tends to keep the airways open by more effective treatment of the bronchospasm, promoting bronchial drainage and providing an effective breathing exercise. The net result is more adequate bronchiolar airways and more effective functioning of what little lung tissue remains.

Surgery in the treatment of severe emphysema is somewhat controversial. Our surgeons refuse to perform some of the procedures that have been described for generalized severe emphysema. If the emphysema is localized in one or two lobes, as bullous emphysema with large cysts, and the rest of the lung tissue is fairly normal, then surgery can be beneficial. A complete preoperative pulmonary function evaluation is most helpful in localized bullous emphysema. The x-ray may be misleading in some cases, as illustrated in figure 4. The chest roentgenograms of a 48 year old man with bullous emphysema in the right upper lobe is shown in figure 4. In this case, one radiologic report was against surgery because of generalized increased perivascular markings, while another radiologic interpretation was generalized pulmonary emphysema with localized bullous emphysema of the right apex and associated pulmonary fibrosis in the bases. Five months before the function studies this patient had had a severe hemoptysis followed by blood tinged sputum for five days, after which there was no further blood streaking. Following the hemoptysis episode he complained of persistent retro-sternal burning pain and discomfort in his chest, shortness of breath with exertion, cough productive of two to three teaspoonfuls of thick, grayish sputum and wheezing mostly at night. He was unable to work and the symptoms were of progressively increasing severity.

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* Mist O_2 Gen. Equipment Co., Oakland, Calif.

* Bennett Respiration Products, Inc., Los Angeles, Calif.

Pulmonary function studies (see measurements in table 2) showed that the total vital capacity was normal, the timed vital capacity for three seconds was decreased slightly and the maximal breathing capacity was moderately decreased. The residual air was increased in a slight to moderate degree, but the ratio or residual to total lung capacity was normal. Intrapulmonary mixing was impaired as shown by an

TABLE 2

PULMONARY FUNCTION STUDIES IN A CASE OF BULLOUS EMPHYSEMA

LUNG VOLUME MEASUREMENTS (BTPS):	*(Predicted)*	*(Observed)*	*(Per Cent Normal)*	
1. SPIROGRAM RECORDINGS:				
VITAL CAPACITY, Supine, ml.	4459	5383	121	
Standing, ml.	4459	4754	107	
TIMED VITAL CAPACITY, Standing 3 sec. ml.	4459	3724	84	
* Standing	4459	3790	85	
MAXIMAL BREATHING CAPACITY, L/min.				
Before bronchodilator standing	147	110	75	
* After bronchodilator	147	119	81	
2. RESIDUAL AIR, SUPINE MEASUREMENTS:				
Test of interpulmonary mixing	Alveolar N_2	3.1 per cent after 7 min. on oxygen		
Residual air, ml.	1486	1918	129	
Total lung capacity (TLC) ml. (Residual + Vital)	5945	7301	123	
Residual air per cent of TLC	25	26	—	
3. VENTILATION FACTOR, PER CENT	100	85	85	
ARTERIAL BLOOD MEASUREMENTS:	REST		STEP-UP EXERCISE	
	(Predicted)	*(Observed)*	*(Predicted)*	*(Observed)*
1. OXYGEN CONTENT, VOL. PER CENT	19.0	19.60	20.0	20.95
2. OXYGEN SATURATION, PER CENT	96+	94.2	96+	96.0
3. CO_2 CONTENT, VOL. PER CENT	48.5	44.8	48.5	41.4
4. pH, GLASS ELECTRODE	7.40-45	7.42	7.40-45	7.46
5. HEMOGLOBIN, Gm.	14.5	15.3	15.2	16.0
6. HEMATOCRIT, PER CENT	45.0	43.3		46.1
PULMONARY VENTILATION MEASUREMENTS:				
1. RESPIRATIONS/min.	14-22	15	20-30	28
2. VENTILATION, L/min./sq.m./BSA (STP)	2.6-3.8	3.17	8-10.5	10.92
3. OXYGEN UPTAKE, ml./min./sq.m./BSA (STP)	120-145	106	500-600	418
4. OXYGEN PER CENT EXTRACTED FROM INSPIRED AIR BREATHED	4-5	3.36	5-6	3.83
EXERCISE, ONE MINUTE STEP-UP TEST	(28)	Steps on stool 8 in. high.		
Duration of dyspnea	90 sec.	(Normal 90 sec. or less).		

BTPS (Body Temperature, Barometric Pressure, Saturated), STP (Standard Temp. Pres.)

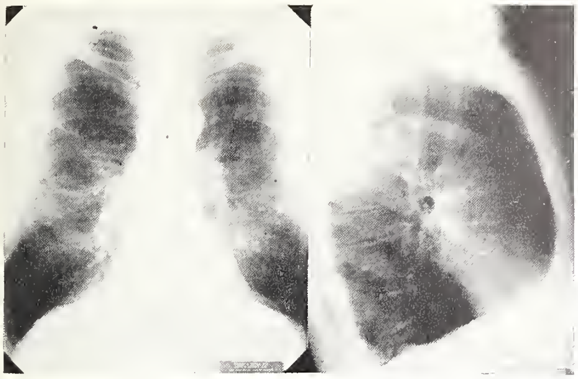

Fig. 4. The anterior-posterior and lateral chest roentgenograms of a 48 year old man with large cysts in the right upper lobe. The radiologic interpretation was adverse for surgery. The pulmonary function studies indicated lung function adequate for surgery.

alveolar nitrogen of 3.1 per cent after seven minutes of oxygen breathing. The increase noted for the residual air and the alveolar nitrogen in this case can be accounted for on the x-ray changes present in the right upper lobe. The lung volume measurements indicate the rest of the lung to be fairly normal and absence of generalized emphysema. Furthermore, the arterial blood studies revealed the exercise saturation to be higher than the resting and in normal range. The carbon dioxide content and pH were normal both at rest and with exercise. The exercise oxygen uptake was decreased in a moderate degree in the presence of a normal minute ventilation, which reduction suggests some increase in pulmonary vascular resistance. The function studies indicated that this patient had adequate reserve for a right upper lobectomy. Surgery was performed with resection of the right upper lobe, which consisted mostly of multiple large cysts. The lower lobe expanded easily after removal of the upper lobe, and the surgeon reported that it appeared as normal lung. Postoperative convalescence was uneventful and the patient returned to work after three months. There has been no further difficulty.

CONCLUSION

The early diagnosis of emphysema by the usual clinical means is often difficult and frequently missed. Even in severe emphysema, the chest roentgenogram may be misleading in some cases, and the reverse situation occurs. Pulmonary function tests are well suited to evaluate the extent and severity of emphysema in the individual case. No single test of function has been found satisfactory, rather a battery of physiologic tests are required for accurate diagnosis and evaluation in the individual patient. Function tests are helpful for surgical or medical management or assessing disability status.

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Experiences With Oral and Rectal Contrast Media in Pediatric Radiology

THE USE OF CONTRAST media in pediatrics has been established as reliable, and often indispensible, by the contributions of many early pioneers, pediatric radiologists and the like. Their contributions are too numerous and praiseworthy to be given justice here.

In our experience there are but few contraindications to contrast studies, and the benefits accrued by the proper selection of the medium optimum to the situation are most gratifying. It is doubtful that the criteria for selection of opaque media are universally in agreement and it is equally doubtful that this is an essential prerequisite providing the method employed by any individual is usually successful.

It is the purpose of this paper to briefly review some of the literature and to render an opinion as to the effectiveness of oral Hypaque as a contract medium in pediatrics.

COLON EXAMINATIONS

The pediatric radiologist is frequently called upon to evaluate the suspiciously distended abdomen of a newborn infant, which usually initiates a routine of examinations often referred to as an "obstruction series." Hope[1] pleads for uncomplicated and unpretentious simplicity. The examination should include upright and lying abdomen roentgenograms as well as inverted radiographs when indicted. Quite often examination of the abdomen will reveal no gas in the rectum and sigmoid, only to have it distend nicely on the inverted roentgenogram where Boyle's law is given a chance to provide an excellent contrast evaluation. In such instances further examination may be quite unnecessary as the complete patency of the colon has been established, ruling out a mechanical ileus (except congenital megacolon which will be more completely discussed later on).

Most radiologists agree that in infants it is nearly impossible to distinguish distended small from large bowel. It follows, therefore, that unless air in the rectum and rectosigmoid can be clearly demonstrated, mechanical obstruction cannot be ruled out.

Contrast media in the practice of pediatries is discussed. It is brought out that Hypaque solutions have been used advantageously in colon studies, fistulous tract, esophageal areas and the small bowel in newborn infants.

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The indications for contrast enema should include such reasons as: (a) mechanical versus adynamic ileus, (b) confirmation of a suspected malrotation, (c) filling through a fistula in imperforate anus, (d) suspicion of Hirschsprung's disease (congenital megacolon), (e) suspected reduplications, mesenteric cysts, Meckel's or polypi.

In those instances in which mechanical obstruction of the colon is clearly not suspected (as in (e)), the use of a barium enema, as ordinarily administered, is probably best because it is routine, inexpensive and effective. Almost everyone agrees that the use of barium above an obstruction in the left colon where it can mix with dehydrating stool can convert an incomplete obstruction to an emergency.

In these instances, we have been using a relatively new contrast medium called Oral Hypaque. Because it is completely water soluble, it has all of the aqueous advantages of the barium suspension, without the attendant threats. There is no drying out on the mucosa. Its density is satisfactory, and can be immediately and effectively changed by the simple addition of more solution (or powder) for greater contrast and more water for lesser contrast (polyps and such).

The advantage over iodized oils (as recommended for use in the fistulae for imperforate ani) is the facility of handling a less viscid material. Its aqueous properties give more complete and rapid filling and it is less expensive than iodized oils in the quantities required for this kind of examination.

The special circumstances concerned with congenital megacolon (and there is little to support the term "mega"-colon in the newborn infant) require a few words of caution. This disease is of congenital origin and most often involves only the lowest segments of the colon as an isolated feature. The demonstration of air in the rectum by use of an inverted radiograph does not preclude a diagnosis of aganglionosis even though most other mechanical causes are obviated. (Keep in mind that rectal air in small to moderate quantities is often introduced by repeated rectal examinations or early digital dilatations.) The anxious individual who introduces the enema tube sufficiently high in the colon to prevent spillage will find that spillage is not prevented in this manner and that the opportunity for an important diagnosis may have been obviated. Procrastination with a newborn infant suffering from bowel aganglionosis can prove rapidly fatal. They do not tolerate obstruction well even though it may be incomplete. The proper examination finds the enema tip not over 1 inch above the anal canal and the tube and buttocks taped together. This technic guarantees fewer replacements of the tube during the examination. Besides a high index of suspicion it is well to use (a) a good oblique film of the rectosigmoid, (b) an opaque medium which is not apt to convert an unstable colon into a complete obstruction, (c) discretion as to the amount of water introduced above the narrowed segment although water intoxication is a greater danger as the colon gets larger and is less apt to occur in the newborn. (Isotonic saline solution is safer.)

So much has been said and so little written about the extravasation of barium sulfate into the peritoneal cavity that a few paragraphs should be devoted to it here. It is related as much, if not more, to the difficulty which radiologists have with regard to giving radiopaques by mouth to a patient suspected of having a small intestional obstruction. We doubt if there is any other area in medicine about which there is so much opposition with so little to support it. This area will be covered more completely in a later section.

According to reported cases at least (which generally agree with our own experiences) extravasation of barium sulfate into the peritoneal or retroperitoneal spaces during a barium enema is coincidental with the use of an inflatable device or the presence of a diseased colon.

Sanders[2] followed one case of barium in the retroperitoneal spaces for three years and subsequently confirmed his impression of its innocuity by a series of installations of barium into the peritoneal cavity of rabbits. His conclusions that infected fecal material and not barium was responsible for the profound systemic reactions frequently associated with extravasation are confirmed by Kleinsasser's[3, 4] experiments with dogs. Some foreign body reaction does occur in the retroperitoneum however.

As a matter of fact, barium granulomata are usually seen as mucosal lesions. They occur a surprisingly short time after routine barium enema.[5] These lesions are reportedly innocuous, asymptomatic and self limiting, and they disappear spontaneously. Their greatest significance lies in the fact that they should not be confused with early carcinoma. Although unconfirmed, small mucosal breaks are thought to be precursors.

As early as 1882 Quenn showed that the normal intestine could tolerate a pressure of from 50 to 60 cm. of mercury (about 20 cm. of mercury pressure is developed during defecation). A water column of about eight feet is required to rupture the normal colon. In reporting the rupture of a normal colon during barium enema the logic of Hartman's[6] conclusion is fortified. Rupture and the balloon technic have an undeniable correlation. Serjeant's[7] reported rupture following a barium meal is remote enough to be a statistical artefact.

Enema reduction of intussusception in infants and children was responsible for rupture in 0.35 per cent of 1,134 cases reported by Leichtling.[8] Interestingly all ruptures occurred in patients with symptoms longer than 48 hours. He did not venture an opinion as to whether the extravasation contributed significantly to the 100 per cent mortality (four cases).

Besides Sanders,[2] the work of Kay and Choy[9] would tend to cast a faint shadow at least on the enthusiastic exoneration of barium sulfate. Their observations in mice show the presence of adhesions and peritoneal reaction as early as four days after injection of barium sulfate into the peritoneal cavity. The severity of the reaction seems to be proportional to the amount injected.

One would conclude from the foregoing that the greatest hazard attending a colon extravasation is centered primarily in the unsterile matter carried with it. The presence of barium sulfate in the peritoneal or retroperitoneal spaces can, of its own, produce adhesions. Crandall[10] alludes to absorption of barium into the blood stream and subsequent changes in bowel motility. His discussion goes so far as to suggest the use of Zirconium dioxide as a replacement for the barium medium whenever there is danger of rupture or contact with bleeding surfaces.

The Upper Gastrointestinal Tract

Turning to the other end of the gastrointestinal tract one finds additional uses for Hypaque. In our experience there is no demonstrable difference between this medium and other aqueous iodized opaques when used in the gastrointestinal tract. It is important, however, to consider the expense of using packaged material prepared for intravenous use, particularly since the amount of solution required at times may be considerable, and always varies, with the degree of success in the first attempt.

The examination of a patient with esophageal atresia poses a few interesting problems. The condition should be suspected early where excessive salivation and respiratory distress are confirmed by the inability to pass a catheter into the stomach. In spite of this the radiologist often becomes part of the diagnostic team whenever there is doubt as to existence, extent or extraneous factors.

Our technic is a simple demonstration of the blind pouch by insertion of 1 cc. of a 20 per cent Oral Hypaque solution, which requires but a few moments to do. We prefer the aqueous over the oily radiopaques, because it is easier to handle and if inadvertently aspirated there is less chance of a persistent bronchogram masking early pneumonia which is a frequent complication of this lesion.

Small Bowel

Allen[11] and others[12-14] described experiences with Hypaque Sodium Powder in the small bowel. The rapid transit time and the advantages of an early answer in suspected small bowel obstruction render it more valuable than barium in these cases. One is not particularly concerned with the bitter taste for infants, because more often than not the sick ones are not in the mood for nursing the bottle anyway. The nasogastric tube is a simple, safe and thoroughly effective method of filling the stomach. The older child finds Coca-Cola a suitable masking medium.

Although we are not convinced of significant disadvantages to barium in the peritoneal cavity, it must be admitted that the patient is probably better off without it. The previous comment is made to preface any remarks concerning a poorly understood and equally poorly documented universal attitude "no barium to the small bowel obstruction." At least now there is one good reason for such a statement since it seems that Hypaque will be superior to it in cases of high obstruction in which an earlier diagnosis is always to the patient's advantage.

Summary

1. Hypaque solutions have been used in colon studies as well as fistulous tract injections with adequate visualization and some stated advantages over barium sulfate suspension and iodized oils.

2. Unique advantages in visualization of esophageal areas are noted.

3. The advantageous use of this material in the small bowel study of infants is confirmed.

4. The advantage of solution over suspension has been alluded to by other authors.

Material for this study was supplied by Winthrop Laboratories, 1450 Broadway, New York 15, New York.

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Recovery Coupling

COUPLING IN THE electrocardiogram is usually explained by the theory of reentry; this is based on the existence within the myocardium of areas in which recovery from the refractory state is slower than normal. A supraventricular impulse proceeding through the ventricular myocardium in normal fashion fails to depolarize a small area or areas in which recovery is for some reason delayed. It is postulated that this wave of excitation (depolarization) will reenter the region of delayed recovery by a circuitous route and find it now responsive. The adjacent normal myocardium has by then recovered from the refractory state and the entire ventricle may again be stimulated as an extrasystole.

A new theory on ventricular coupling is advanced together with a suggested new terminology.

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The reentry phenomenon is particularly prone to occur after full or over-digitalization of diseased hearts. It is interesting to note that it is difficult or impossible to produce this type of arrhythmia in healthy hearts even with toxic doses of digitalis. A diseased myocardium plus digitalis set a convenient stage for the arrhythmias under discussion (bigeminy, coupled rhythm). Digitalis causes a speeding up of the recovery process (repolarization), particularly in the subendocardial layers of the myocardium so that in fully digitalized hearts the direction of the recovery process is reversed, from endocardium to epicardium.

It is generally agreed that ventricular premature contractions originate in an irritable focus which sends out impulses at regular or irregular intervals that have no fixed time relation to the preceding normal sinus beat. This explanation becomes untenable if the premature contractions occur at fixed intervals after the normal heart beat, and especially if the cardiac rhythm is irregular as in sinus arrhythmia or auricular fibrillation. This persistent fixed time relationship in an otherwise irregular heart has been explained by the theory of reentry as outlined.

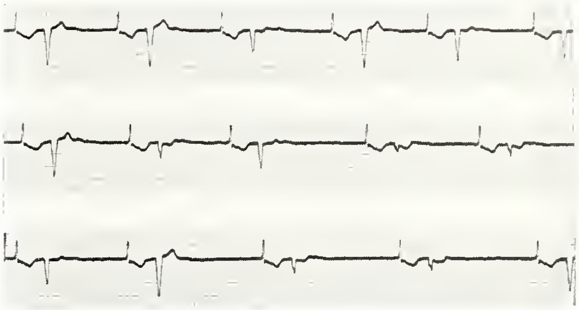

Fig. 1. This electrocardiogram of a fully digitalized patient shows auricular fibrillation with a slow, irregular ventricular response. There is fixed coupling, the prematurities always originating exactly .24 seconds after the normal complex and after the inscription of the T wave. The changing configuration of the premature contractions is best explained by the fact that depolarization does not proceed in exactly the same fashion in all premature beats. As mentioned in the text, the best explanation for this coupling is that the repolarization wave (T wave) enters an area of slow recovery, activates this area and produces a premature contraction at a time when most of the myocardium has recovered (repolarization coupling, recovery coupling).

I would like to propose a new theory to explain the phenomenon of coupling, particularly in cases of totally irregular heart action. The premature contractions in irregular hearts with fixed coupling like the EKG shown (fig. 1) practically always occur at the end of the T wave (repolarization). At this phase of the cardiac cycle depolarization has long been completed, and it would be difficult to explain the premature contraction on the basis of reentry by an electrical force which is already extinct. It seems more logical to explain excitation of areas with delayed recovery by the oncoming process of repolarization. This would also give a convenient explanation of the occurrence of the premature contractions after the inscription of the T waves. A descriptive term for this phenomenon then would be "recovery coupling" rather than "reentry."

SUMMARY

Ventricular coupling has in the past been explained on the basis of reentry of the depolarization wave into an area of delayed recovery. The fact that the premature contractions in ventricular coupling occur after or in connection with

(Continued on page 714)

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Objective Measures in Psychopharmacology Baseline Observations

One of the most interesting features of the psychiatric scene in recent years has been the progressive number of new, potentially valuable, psychopharmacologic agents. In consequence of this, the task of reliable evaluation has assumed a great proportion. Ordinarily, this assessment has been highly empirical, requiring lengthy evaluation by individual observers. In many instances, years must elapse before the true value of a drug is realized.

Certainly, the legitimate role of clinical empirical judgment is an essential one. Moreover, the function of a trial and error period is undeniably of notable import in deciding a drug's therapeutic value. However, there appears to be an increasing urgency for a more rapid and objective assessment of these new agents. One possible solution is the development of an evaluatory means of mechanical nature, thereby imposing less of a burden time-wise on the personnel concerned. Integral to this idea is that such a system would suffer less from the personal, subjective variability of most previous methods. Correspondingly, of course, such mechanizations, if taken alone, may suffer markedly from the deficiency of impersonality. One possible answer has been sought in the development of such a mechanical device as alluded to, which would measure some phase of patient life altered or not by the agent in question. Such a mechanism should, in addition to its own mechanical accuracy and reliability, be of such scope that it retains sensitivity over the entire span of alteration of that specific facet of activity to which it is attuned. Moreover, it should be used conjunctively with traditional methods of clinical evaluation, both for purposes of supplementation as well as a means of assessing its utility against the reference frame of established results.

Frequent has been the assertion by attendants and other ward personnel of extended experience in patient contact, that they could judge fairly well what the condition of their ward was by listening to the characteristic ward noises. Such a subliminal clue to group patient behavior, total ward noise, if it could be instrumentally measured, might then lend itself to objective studies.

The need for objective measures in psychopharmacology is considered and a method for such measure is described.

The authors are from the Research Laboratories of the St. Louis State Hospital and the paper was presented at the twelfth Annual Meeting of the Mid-Continent Psychiatric Association which met in St. Louis September 18-20, 1959.

The research was supported in part by a research grant (M2823 (A)) from the National Institute of Mental Health, U. S. Public Health Service.

Outstanding among the many new chemotherapeutic agents, have been the tranquilizing drugs. Their role is a highly controversial one—the extent and nature of their action deserving further exploration. Each month new products are placed on the market. Table 1 shows just a few of these. In view of this problem and extending the prior theorization concerning modes of objective evaluation, we have sought during the last year to employ the measurement of total ward noise

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Recovery Coupling—Continued

the T wave (repolarization) makes it more reasonable to assume that the premature beats are caused by the entrance of the recovery wave into areas with prolonged refractory periods. It is proposed that the term "reentry phenomenon" as the explanation of ventricular coupling should be replaced by a more descriptive term like "repolarization coupling" or "recovery coupling."

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as one manifestation of tranquilization.[1] For such investigation, a ward of patients all on chlorpromazine medication, prior to the beginning of the experiment, was employed. When a plateau of optimal tranquilization on all patients was reached, experimental recordings were made. A tape recorder of good fidelity was placed on the ward in the same position each day and recordings were made at the same time each day. Through repeated samplings, it was determined that a recording period of one hour was representative of the activity level of the ward for that particular day. A series of five daily recordings was used to give a reliable sample of the noise index for any given series. The individual tapes from this series of recordings were then monitored and fed into an electronic integrating device. A mechanical counter operated by the integrator provided a numerical total of the hour's activity. This number was referred to as the Noise Level Index. Upon obtaining this series of recordings, all chlorpromazine was discontinued and another daily series of five recordings was made. This series of recordings was treated in the same manner, giving an index which was felt to be indicative of the level of noise then present, plus the residual tranquilizing effects of the chlorpromazine remaining in the individual patient. In order to test this assumption, two weeks later another series of recordings was obtained. The entire procedure was repeated using reserpine as the tranquilizing agent (fig. 1). The present study reported here was developed in view of the cumbersome and time-consuming method utilized in the previous work.

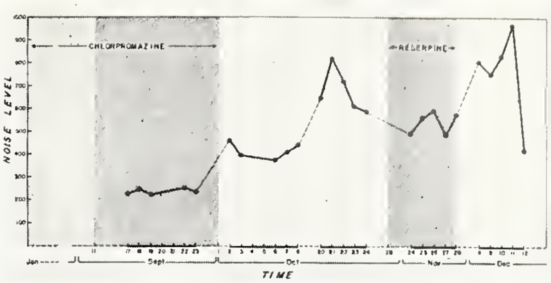

Fig. 1. Graph illustrating the effect of chlorpromazine and reserpine upon noise level. (From Heusler, A.; Ulett, G. A., and Blasques, J.: J. Neuropsychiat. 1:23-25 (Sept.-Oct.) 1959.)

TABLE 1

TRANQUILIZING AGENTS

Phenothiazine Derivatives	
1. Promazine	Sparine
2. Methoxypromazine	Tentone
3. Triflupromazine	Vesprin
4. Promethazine	Phenergan
5. Thioridazine	Mellaril
6. Mepazine	Pacatal
7. Thiopropazate	Dartal
8. Perphenazine	Trilafon
9. Chlorpromazine	Thorazine
Glycol and Glycerol Derivatives	
10. Meprobamate	Equanil/Miltown
11. Isopropyl Meprobamate	Soma
12. Phenaglycodol	Ultran
13. Promoxolane	Dimethylane
14. Oxanamide	Quiactin
Diphenyl Methane Derivatives	
15. Hydroxyzine	Atarax/Vistiril
16. Captodiamine	Suvren
17. Benactyzine	Suavitil
18. Pipradrol	Meratran
19. Azacyclonol	Frenquel
Rauwolfia Alkaloids	
20. Reserpine	Eskaserp, etc.
Miscellaneous	
21. Ectylurea	Nostyn/Levanil
22. Chlormezanone	Trancopal

Procedure

The difficulties encountered with tape-recordings and monitoring were obviated with the development of a device combining an electronic integrator and a mechanical counter. This noise level recorder was employed to measure total sound on the ward as produced by over-all patient activity. It consists of a General Radio sound level meter (No. 1551-B) used with the filter switch in position A to emphasize sound in the range of the human voice. This was attached to an electronic integrator and a mechanical counter.

A built-in clock permitted the automatic recording of sound for preset periods of time. Recordings were taken with the machine at the same time daily and in the same manner for a period of one hour. A numerical total of the hour's activity was provided. This was arbitrarily referred to as the noise level index. The number was given in units of sound level, which were calibrated in reference to the decibel level of sound over a designated period of time. This noise level index was thus representative of ward activity through the recording hour as measured by one psychomotor modality, the total amount of noise produced on the ward.

The investigation has been carried out on what has been considered a habit-training ward with a population of 81 patients. The hall contains a large solarium which can easily accommodate the total number of patients and here much of the daily activity is centered. Here recording equipment was installed so that all measurements would be obtained in a standard locale. It is to be noted that no significant alteration of general routine was entailed in having all the patients assembled in this area for a specified hour each day. This hall is located and functions in such manner that it is relatively unaffected by routines other than its own.

The 81 female patients were grouped together largely on the basis of their disturbed behavior rather than purely by similarity of diagnostic category. For example, many of the patients had been originally transferred from other halls by reason of their untidiness or because their overactivity was of disturbing proportion on other units. Many of this group were markedly delusional with a significant degree of hallucinatory behavior being present. The behavioral profile, shown in table 2, lists a number of estimated percentages in specific descriptive categories.

TABLE 2

CHARACTERISTIC BEHAVIOR IN 81 PATIENTS ON EXPERIMENTAL WARD

	No.	*Per Cent*
Associations—Irrelevant or Blocked	72	90
Work—Totally Incapable	55	69
Affect—Inappropriate or Spontaneous Outbursts	26	35
Inaccessible	23	29
Hallucinating	20	25
Speech—Uncommunicative or Mute	39	49

Their diagnoses cover a broad spectrum with the greatest proportion being schizophrenic and significant numbers included under mental deficiency, manic depressive reaction, and organic brain disease (table 3). Their age range is from the third through the eighth decades. The majority have been hospitalized for some years and present as a relatively chronic group. Transfers in and out of the ward were rigidly controlled, thereby minimizing the introduction of new influences and changes in over-all environment.

Realizing the need for baseline studies prior to the evaluation of specific new drugs, a placebo study was proposed. The rationale for such a procedure was the assessment of the sensitivity and the selectivity of this mode of testing. Such a study would make future indices characteristic of a certain agent more meaningful in the light of what the hall would be like in a natural state and when responding only to a nonspecific medication effect as seen with the placebos.

TABLE 3

Diagnosis	*Number of Patients*	*Average Age*	*Average Hospital Stay*
Manic Depressive	7	61.4 yrs.	21.4 yrs.
Schizophrenia	47	57.5 yrs.	26.9 yrs.
Catatonic	10	51.2 yrs.	24.4 yrs.
Hebephrenic	9	49.9 yrs.	19.1 yrs.
Paranoid	7	62.4 yrs.	22.0 yrs.
Undifferentiated	21	62.2 yrs.	33.0 yrs.
Mental Deficiency	22	44.6 yrs.	18.5 yrs.
Chronic Brain Syndrome	5	62.0 yrs.	15.2 yrs.
Total	81	54.0 yrs.	23.4 yrs.

The patients were all given three placebo-like compounds. All three were identical in appearance and given on a regime of one capsule three times daily. Each agent was then given for a period of one week with a medication-free interval of one week, separating each period of application. All the patients on the hall received the same substance on the same schedule. In order to obviate the introduction of other variables, the compounds were known only as A, B and C (table 4) to all hospital personnel in contact with the patients, including the investigators. The key to the identity of the compounds was kept by the supplying drug company and broken only after completion of the study.

TABLE 4

COMPOSITION OF COMPOUNDS A, B, AND C

Compound A—Scopon, Consisting of	
1. Scopolamine	.2 mg.
2. Reserpine	.05 mg.
3. Phenobarbital	10 mg.
Compound B—ASA, gr. 5	
Compound C—Lactose placebo	

Prior to the initiation of the study, the patients had been off medication for a period of more than six weeks so that previous continued effect would not be a distorting factor. Adequate baseline values were obtained during this period. All these agents were given to the patients in the same fashion without any undue claims being made in order to minimize additional variables.

In order that the clinical applicability of this system might be better evaluated and so that the results obtained might be compared with and viewed in the light of other evaluatory methods, various correlative studies were simultaneously utilized. Paramount among these was the use of the Malamud Rating Scale.[2, 3] Two observers familiar with the hall and its patients rated the total population during each of the intervals that a change in medication policy was effected, that is, prior to the initiation of the study, during each of the three one week periods of the compounds use, during the interim periods and in the week following cessation of the last agent. The patients were divided into two groups of 40 patients each. The groups were then evaluated by the same observers for the entire seven week period. The patients were seen and talked to individually on Wednesday through Friday of each week. Moreover, ward staff members and their records were consulted for additional information concerning the patient's behavior. The rating was then made in accordance with these three data sources. Finally, the independently made ratings on the two groups of 40 patients were brought together and averaged. The data was then analyzed in terms of each specific behavioral characteristic measured as well as in terms of the sum of all measured behavioral characteristics.

Results

Each day of the study a noise level index was obtained. The values varied widely from a minimum of 3,698 to a maximum of 13,532. The results were graphed (fig. 2)* revealing a fluctuant course with a continuous variability. Generally, no pattern of significant response to any of the compounds could be interpreted from the results which appear to follow a random course.

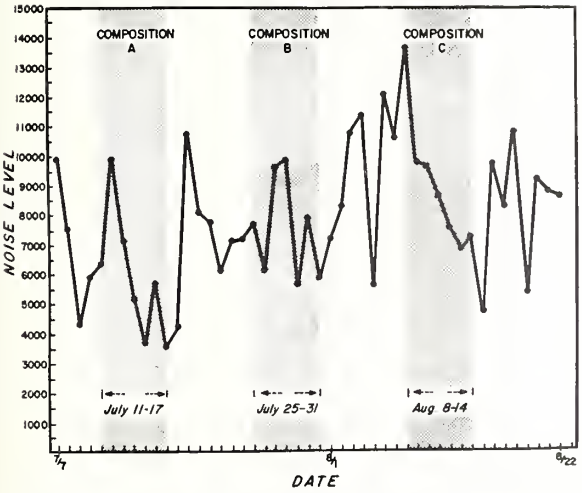

Fig. 2. Graph illustrating the changes in noise level with administration of compounds A, B and C.

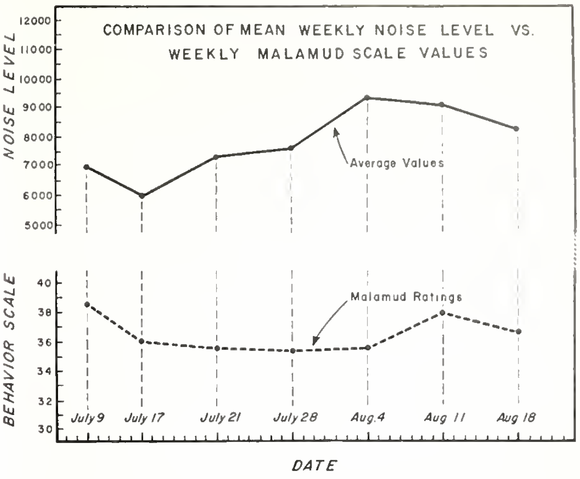

Fig. 3. Graphs illustrating average weekly noise level and behavioral scale ratings during course of investigation of compounds A, B and C.

It should be noted that many of the patients responded favorably to the idea of being medicated. A goodly number being for a considerable period hospitalized and on medication, were both pleased and encouraged with the initiation of each compound. Similarly, a proportion were displeased with each discontinuance. The hall personnel likewise responded with a variety of reactions. Certain of the personnel were highly skeptical of all three agents, while a majority considered one or the other more effective. There were reports for each agent by some of the personnel claiming better individual patient-reaction, improved over-all activity, better nocturnal sleep response, less combativeness and so forth. None of the personnel considered all of the agents particularly effective, nor did any regard their agent of choice as notably effective in the tranquilization properties which were expected and sought. In our observations there was little change in the total hall activity and nothing of startling response in any patient, although as noted, some were significantly encouraged with each agent.

Patients individually and the group collectively received a total of seven numerical scores on each of the individual scale categories, and also a figure representative of the total scoring at that time. These latter are illustrated in the graph, figure 3. Actually, minimal alteration in the scores for any of the weekly periods is had. Generally, they displayed according to the rating scale values essentially the same picture throughout the entire time. To contrast the ratings of the Malamud Scale with the noise level indices, the latter are shown by weekly averages of the readings during each period of the experiment.

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* It is to be noted that the numerical indices of the study here reported are calibrated in terms of decibel level, consequently the values are different from and bear no direct numerical relation to those of the prior study.

DISCUSSION

As noted previously, the figures of both the noise level index and the behavior rating scale revealed no significant pattern. The graphic representation of these values appears simply a random variation without discernible influence from the placebo agents employed. This would indicate an agreement in a negative response between the two modes of evaluation in that both continue to portray the ward population as not notably altered. Moreover, this appraisal is in substantially similar agreement with over-all clinical inspection, in that, although minor variations were suspected with each agent, all observers agreed that no noteworthy alterations in behavior were effected by any of these agents. This correlation would appear to favor the reliability of employing the noise level index as a measure of patient-response by virtue of its similarity to the more traditional modes of evaluation. The implication herein is that future utilization of the noise level index thus obtained can be valuable in the rapid, objective evaluation of a host of pharmacologic agents. It should also be valuable to know that in this population and for the behavior facets measured little ameliorating effect is to be expected from the mere act of administering a tablet.

In addition to the correlation of the noise level index with more traditional modes of evaluation, the use of new independent methods presents itself as a possibility for future studies. Additional indices of patient-life provide such an opportunity. Other facets of total activity considered applicable include measurements of the sleep pattern and total patient movement, evaluated simultaneously with noise level recordings. Perhaps with the utilization of measurement in a number of such areas, a profile of drug effect can be achieved, pointing out more completely the pattern of a drug's action.

CONCLUSION

The current need for objective measures in psychopharmacology has been considered, and a method for such described. Using total ward noise as one index of patient life, measurements have been taken and a Noise Level Index obtained, which appears to be characteristic of a drug's effect as evaluated through this one mode of assessment. These findings have been compared with the results of a behavioral rating scale during a placebo study.

The compounds investigated were furnished through the courtesy of Dumas-Wilson & Company, St. Louis.

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Present Day Obstetrical Anesthesia

A review of various anesthetics used in the field of obstetrics is presented, giving the advantages and disadvantages of each. Conclusions on the best agents in certain circumstances are outlined.

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ANESTHESIA in obstetrics in many ways is similar to anesthesia used in specialties. The basic rules, technics and complications that are a part of other anesthetic procedures also apply in obstetrical anesthesia. The maintenance of a dry, patent airway, of fluid and electrolyte balance, and the careful observation and maintenance of a suitable blood pressure are just a few of the problems that are common to all types of anesthesia administration. Cardiac arrest, toxic reactions and bronchospasm are also common factors and are managed in a similar manner when encountered in obstetrical anesthesia as when encountered in other procedures.

Most important in all medical procedures are professional judgment and the recognition and proper handling of basic patient differences. Therefore, it is deemed advisable to attempt only to review those phases of anesthesia that relate closely to its use in obstetrics and that may be unique in that specialty.

The most important and unique factor in obstetrical anesthesia is that there are two (or more) individuals being dealt with instead of one. A large percentage of the problems encountered in obstetrical anesthesia are problems that relate directly to the unborn fetus. It is necessary to keep this in mind to recognize the full meaning and importance of some of the statements in the following sections.

PREMEDICATION

In obstetrical anesthesia the selection of the agents to be used for premedication and their proper administration are about equally as important as the anesthesia per se. Therefore, considerable consideration will be given to the subject of premedication.

The more important drugs used for premedication in obstetrical anesthesia include: barbiturates, belladonna derivatives, apomorphine, opiates and newer synthetic analgesics. The indications, contraindications and the more important advantages and disadvantages of the more commonly used of these drugs and various combinations thereof will be discussed. It should be remembered that proper psychologic management reduces the dosage requirement of premedicating agents and delays the necessity for the administration of the initial dose. Certain precautions should be followed regarding the administration of medicinal analgesic agents: they should never be administered prior to positive proof of cervical dilatation and effacement (3 cm. cervical dilatation in the primipara and 4 cm. dilatation in multiparae).

SCOPOLAMINE

The advantages of scopolamine are numerous:

a. Scopolamine is the safest and most effective available amnesic agent.

b. It produces psychic sedation in the absence of other drugs.

c. It effectively produces and maintains a dry respiratory tract.

d. It blocks untoward autonomic effects, as laryngospasm and bronchospasm (which frequently result from the administration of barbiturates).

e. It prevents vagal type of carotid sinus syndromes.

f. It provides curative and prophylactic parasympatheticolytic effects.

g. Scopolamine produces no demonstrable ill effects on the infant.

The two most important disadvantages of using scopolamine are the non-predictability of producing muscular over-activity and restlessness when used in successive doses in labor, and a flushing and dryness of the skin. The incidence of the former disadvantage may be kept at a minimum if the total dosage of scopolamine does not exceed 1.0 mg. Following the onset of muscular over-activity and restlessness, ether, paraldehyde, barbiturates or apomorphine may be used to combat the complication. However, only apomorphine in sub-emetic doses does not alter the progress of labor and cause depression of neonatal reflex irritability.

APOMORPHINE

In obstetrical anesthesia apomorphine is used by some in emetic doses to effect emptying of the prepartum stomach prior to the administration of a general anesthetic agent. However, more frequently apomorphine is used in sub-emetic doses in combination with scopolamine. This combination is used quite extensively and with good results as reported by many writers. Apomorphine acts to antagonize the muscular over-activity and excitement sometimes produced as a side-action of scopolamine; has a sedative and limited analgesic action, and acts to control emergence excitation.

The combination of apomorphine and scopolamine afford the following distinct advantages:

a. This combination does not influence the progress of labor or alter the reflex irritability of the newborn infant.

b. The third stage of labor is not influenced.

c. The incidence of postpartum respiratory complications is reduced.

d. Fetal morbidity or mortality are not influenced.

e. The duration of labor is shortened in many instances.

f. There is a reduction in pain intensity.

g. This drug combination may be given at any time during labor without influencing the course of labor—however, preferably their administration is withheld until the pain of contractions is moderate.

Only a mild nausea and drowsiness are produced as ill effects of this drug combination when properly administered.

SCOPOLAMINE AND MORPHINE

The combination of scopolamine and morphine has been used quite extensively in the past in obstetrical anesthesia to produce "twilight sleep." However, the serious complications of muscle over-activity and restlessness in the mother and respiratory depression in the fetus have made this drug combination fall rapidly in popularity since the introduction of other less dangerous and equally effective drugs in this field of practice. Morphine is definitely contraindicated when either liver damage or hypotension due to poor circulation is present. Morphine also should not be used within four hours of delivery or during the latter part of the first stage of labor and never in the second stage of labor because of the serious effects on the baby. The greatest misuse of morphine is in the treatment of restlessness associated with hypoxia or hemorrhage.

ATROPINE

In comparison with scopolamine atropine lacks the distinct advantage of acting as an amnesic agent. Also, atropine is more apt to produce cortical stimulation and to produce a blood pressure elevation, while it is less effective as a drying agent. Because of these disadvantages atropine is not commonly used in obstetrical anesthesia.

BARBITURATES

Several of the barbiturates are used quite frequently and with good results as hypnotics (should definitely be limited to the first stage of labor), as anticonvulsants and, most frequently, when regional anesthesia is to be used. The numerous advantages of the use of barbiturates include their hypnotic effect, amnesic effect, analgesic potentiation effect when combined with other pain relieving drugs or psychic sedatives, and their assistance in the prevention of cortical stimulation resulting from the use of procaine-type drugs. Barbiturates also assist in providing rapid and pleasant induction and assist in maintenance of anesthesia, and they assist in making the emergence phase more pleasant.

There are also several disadvantages of the use of barbiturates among which are (a) non-predictability of side reactions, (b) occurrence of muscular over-activity during labor, (c) occasional allergic responses, (d) accumulation of mucus in the respiratory tree, (f) laryngospasm and bronchospasm, (g) shallow and irregular respirations, (h) cyanosis and hypoxia and (i) sometimes a transitory apnea at birth in newborn infants is produced.

Regarding the respiratory system, it has been reported that respiratory complications are produced nearly twice as frequently with the use of nembutal than with the use of amytal or seconal. Previous damage to other organ systems should be considered before the administration of barbiturates as the ultra-short acting drugs are detoxified by muscle tissue and possibly the blood; the short acting drugs by the liver; the intermediate acting drugs by both the liver and kidneys, and the long acting barbiturates are eliminated practically unchanged by the kidneys.

DEMEROL (ISONIPECAINE, PETHIDINE, MEPERIDINE)

Demerol is another drug that is commonly used for premedication in obstetrical anesthesia and it is probably condemned just as frequently as it is used in that field. There are several good reasons for the condemnation of the use of demerol in obstetrical anesthesia. Although demerol possesses good analgesic properties, it produces no amnesia. Other important disadvantages are (a) uterine inertia may occur with doses of 100 mg. or more every three hours or oftener, (b) demerol carries an addiction liability, (c) when given intravenously demerol may produce a sharp fall in blood pressure, tachycardia, emesis, temporary loss of consciousness and respiratory depression, (d) when given intramuscularly three hours before delivery demerol may be expected to cause a definite degree of depression of the reflex irritability of the newborn infant. In spite of these disadvantages in the use of demerol the drug is used commonly as the sole pre-anesthetic analgesic drug in obstetrical anesthesia. Demerol is also used to counteract the restlessness produced by the drug combination of scopolamine and a barbiturate; but, when sufficient dosage of demerol is used, it is only at the risk of producing more depression of the reflex irritability of the newborn infant.

The combination of scopolamine and demerol is not infrequently used, but nausea and vomiting, excitement, profuse sweating, dizziness and a temporary slowing of labor are major side effects produced by this drug combination.

OTHER AGENTS

Thorazine, nisentil, levo-iso-methadon and dihydromorphinone are some of the newer and less frequently used drugs in the premedication of obstetric patients. These drugs are not widely used in obstetrical anesthesia at present but some of the newer drugs may prove to be valuable agents following proper therapeutic trial of these agents.

NALORPHINE

Nalorphine is a central antagonist to depression induced by morphine, dilaudid, meperidine, methadon and their derivatives. Therefore, nalorphine is frequently used to help antagonize neonatal narcosis produced by these drugs. When nalorphine is given to patients who are not depressed by a narcotic, it may act like morphine and produce a depressant effect on respiration. In those instances in which respiratory depression is due to the barbiturate, rather than to the narcotic that has been given as well, the administration of nalorphine may be productive of a convulsion. Because of these major disadvantages of the use of nalorphine, it is believed that the safest method and the method of choice for resuscitation of depressed newborn infants is artificial respiration. Occasionally nalorphine is also used as an analgesic for the mother during labor.

PREMEDICATION SUMMARY

From the review presented on the premedicating agents and their administration, the following regimen for premedication in obstetrical anesthesia has been suggested:

1. For psychic sedation and to determine the patient's sensitivity: Seconal gr. $\overline{\text{ss}}$ to $\dot{\overline{\text{lss}}}$ per os or per rectum early in labor.

2. As labor progresses and hospital admission routine is completed: Seconal gr. $\dot{\overline{\text{lss}}}$ to $\dot{\dot{\dot{\overline{\text{III}}}}}$ per os or per rectum.

3. For amnesia and analgesia with progression of labor:

a. Initial apomorphine and scopolamine medication: scopolamine HBr; apomorphine HCl $\overline{\text{aa}}$ gr. 1/100 (0.6 mg.). Administer intermuscularly when the patient is making progress and the contractions have become painful.

b. Second dose of apomorphine and scopolamine (¾ hour after a): scopolamine HBr gr. 1/150 (0.4 mg.); apomorphine HCl gr. 1/150.

c. Subsequent medications: The same dosages as b one hour after b and every two hours thereafter.

d. If signs of agitation appear: apomorphine gr. 1/100 to gr. 1/50 given in addition—repeat at 15 minute intervals p.r.n.

The contraindications for this premedication regimen are:

a. Hypoxia, due to hemorrhage, shock or respiratory obstruction (as pulmonary edema with pre-eclamptic toxemias).

b. Heart disease with decompensation or imminent failure, obvious arrhythmias or abnormal tachycardia.

c. Esophageal lesions.

d. Premature labor.

This regimen should be applicable to all but a few complicated cases if the foregoing precautions are taken and if complications are properly dealt with when they occur.

Anesthesia

The obstetric procedure to be performed must be in mind when the selection of the anesthetic agent and the proposed route of administration is considered, remembering that complications of varying degrees may arise in any obstetric procedure. Table 1 shows the type and level of anesthesia required for the different obstetrical procedures.

TABLE 1

TYPE AND LEVELS OF ANESTHESIA NEEDED

Stage of Anesthesia	*Obstetrical Procedure and Indications*
Stage I	**(1) Regional analgesia. (2) Patients receiving intermittent inhalation agents with contractions. (3) Patients in labor receiving amnesic and analgesic potentiating agents.**
Stage II	
Stage III	
Plane 1	**(1) Properly premedicated patients to have vaginal delivery, forceps extraction, and episiotomy repair. (2) D and C or examination under anesthesia. (3) Perineal and vaginal plastic repair. (4) Cystoscopy or repair of peri-urethral structures. (5) Abdominal hysterotomies—actual delivery only.**
Plane 2	**(1) Abdominal hysterotomies or hysterectomies. (2) Repair of sphincteric structures. (3) Breech extraction. (4) For relief of uterine tetanic contractions.**
Plane 3	**(1) Internal version and extraction. (2) External version. (3) For relief of Bandl's ring (induce hyperoxemia and hypocarbia to protect fetus from aspiration of amniotic fluid and debris).**
Plane 4	**(1) Occasionally for Bandl's ring. (2) Occasionally for internal or external version.**
Stage IV	**(Paralysis: (1) respiratory, (2) vasomotor, (3) cardio-circulatory).**

Conduction Anesthesia

A few of the conduction anesthesia technics have rapidly grown in popularity in the last few years. This trend is due, in part, to the recognition of the complications inherent in other methods of anesthesia production and, in part, to the disproval of some of the incorrect ideas regarding the disadvantages of and contraindications to some of the conduction technics. Hypotension is one of the major disadvantages of the epidural and spinal technics. However, the recognition of the "hypotensive syndrome of late pregnancy" may well eliminate many cases of hypotension that would otherwise be accredited to the anesthesia. In the "hypotensive syndrome of late pregnancy" there is obstruction of the inferior vena cava by the uterus. This obstruction prevents adequate venous return, reduces the cardiac output, increases the heart rate, decreases the blood pressure, and produces a general shock-like appearance of the patient. To relieve this syndrome turn the patient to one side, or when the patient is in the supine position for delivery manually displace the uterus to the left. These simple procedures without the aid of vasopressors permit an immediate return of the blood pressure to normal in 90 to 95 per cent of patients who have received spinal anesthesia.

Other common complications encountered in the use of conduction anesthesia include infection, toxic reactions to drugs, headache in spinal anesthesia, and trauma; resulting in injury to the spinal ligaments, meninges, periosteum, venous plexuses, nerve roots, spinal cord, cauda equina and intervertebral disks. Urinary retention and/or urinary incontinence, chronic adhesive arachnoiditis, and (with spinal anesthesia) ocular and abducens nerve palsies are further complications of spinal and peridural blocks.

Because the majority of deliveries are performed under what are considered to be emergency conditions, the mother is usually taken to the delivery room with food content in the stomach. This is one of the major factors involved in the transitional trend to the use of conduction anesthesia so as to have a conscious patient and thus prevent aspiration of vomitus and subsequent pneumonia. If the mother is agreeable and is not too apprehensive there are numerous other advantages of having a conscious, awake mother at the time of delivery. These advantages include: (a) cooperation of the patient including the use of abdominal muscles to aid in the delivery of the infant, (b) the feeling of actual participation in the delivery of the infant on the part of the mother, (c) the atmosphere of delivery is pleasant, quiet and cheery for the obstetrician, (d) there is no need for hurry on the part of the obstetrician—thus, eliminating possible errors in technic, contamination, and slipshod repair work, (e) more attention can be devoted to the care of the infant, uterus and the vagina. Other advantages not related to the awakeness of the mother are: (a) no fetal respiratory center depression and (b) improvement in uterine muscle tone with lessened danger of postpartum hemorrhage.

The nerve supply to the birth structures is important in conduction anesthesia. The uterus receives its sensory nerve supply from T-11 and 12 and sometimes L-1; the cervix and upper birth canal from S-2, 3 and 4; lower birth canal from the pudendal nerve, S-2, 3 and 4; and the external genitalia from the ilio-inguinal and genitocrural nerves, L-1 and 2.

A review of the major advantages and disadvantages that are common to all the conduction technics most frequently employed has been presented. Now the factors that are peculiar to the individual technics will be considered.

SPINAL AND PERIDURAL ANESTHESIA

A further advantage of spinal and peridural anesthesia is relaxation of the birth canal, resulting in a lessened danger of cervical and birth canal lacerations.

Disadvantages of these two technics are few when proper skill in administration and adequate precautions are taken. However, the following potential hazards are inherent in these technics when they are performed by inadequately trained personnel:

(a) A high spinal may result, thus producing hypotension and, if sufficiently high, may block the innervation of the intercostal muscles, producing a marked respiratory difficulty.

(b) With the production of hypotension there may be a loss of consciousness and aspiration of vomitus.

(c) A block of autonomic fibers will cause cessation of uterine contractions in early phases of labor. A peridural block will allow labor to continue almost normally during the acceleration phase of labor, but anesthetization of motor nerves may seriously interfere with descent and rotation of the fetal head during the second stage of labor. A spinal may cause cessation of uterine contractions even during the acceleration phase of labor as well as later.

(d) In approximately 1/150 of the cases in which spinal or peridural anesthesia is employed there may occur a partial premature separation of the placenta which will produce fetal distress. The premature separation of placentae is probably due to venous pooling and an increase in pelvic venous pressure.

The indications for the use of spinal or peridural anesthesia are (1) a recent meal, (2) diabetes mellitus, (3) respiratory complications, (4) premature or miniature fetus, (5) selected surgical procedure and (6) fetal distress when further drug depression by transplacental transfusion is best avoided. This includes Rh incompatibility.

Numerous contraindications for spinal and peridural blocks exist as follow: (1) central nervous system disease, (2) mental aberrations, (3) history of chronic headache or backache, (4) history of post-spinal sequelae following previous spinal taps, (5) when the patient is not agreeable to the procedure, (6) rheumatoid arthritis and other spinal column abnormalities, (7) infection in the region of the proposed puncture site, (8) history of allergic reactions to previously administered local anesthetic agents, (9) anemia, (10) advanced cardiovascular disease, (11) serious uterine complications, as uterine apoplexy, rupture or hemorrhage, (12) abruptio placenta or placenta previa, (13) intra-uterine manipulations, (14) markedly increased intra-abdominal pressure, as ascites, distention, ovarian tumors or polyhydramnios, (15) when uterine relaxation is desired or necessary, (16) hepatic disease.

"Saddle block," a low spinal, is a popular procedure in obstetrics. The previous information regarding spinal anesthesia also applies to the "saddle block."

CAUDAL ANALGESIA

Caudal analgesia is not so popular as spinal and peridural technics. It is fraught with the following complications: (1) the possibility of subarachnoid injection, (2) failure due to improper technic and failure to get in the canal, (3) hypotension, (4) slowing of progress of labor and inertia, (5) increase in frequency of forceps deliveries, (6) fetal distress due to high caudal, (7) slight increase in infant resuscitation plus the disadvantages that are present with all conduction technics.

Caudal analgesia would be indicated where a conduction technic is indicated and there are contraindications to spinal and peridural technics but not to the caudal technic.

PUDENDAL NERVE BLOCK

Pudendal nerve blocks are usually performed by the obstetrician; therefore, many anesthesiologists have little opportunity to keep adept at performing this procedure. However, this technic is satisfactory with properly and adequately premedicated patients who deliver without complications. This technic has the distinct advantages of the delivery of an infant that has not been depressed by the anesthetic agent or by the results of complications of the anesthetic agent—with the possible exceptions of allergic reactions to the agent and the resulting complications thereof.

Other Conduction Technics

Para-sacral and para-vertebral blocks are difficult to perform adequately, have several major disadvantages and are rarely indicated. Local infiltration of the abdominal wall for cesarean section may rarely be indicated when general anesthetic agents, spinal block, and peridural block are contraindicated. The disadvantages of this procedure make it impractical under other circumstances.

Inhalation Anesthesia

Aspiration of vomitus, the major disadvantage of the use of inhalation agents, has already been discussed. External abdominal pressure may be sufficient to cause regurgitation and aspiration may subsequently follow. Because of the possibility of aspiration of vomitus going undetected, a mask should never be secured in place by means of straps or other devices. Inhalation agents are also contraindicated when respiratory embarrassment is present. The advantages of inhalation anesthesia are (1) moment to moment control of depth and duration of narcosis, (2) a newborn infant without respiratory depression, (3) adequate operative facilities, (4) short induction and recovery periods, (5) readily accessible oxygen and (6) retrievableness of the anesthetic agent.

The favorable and unfavorable factors of the major inhalation anesthetic agents employed in obstetrics are presented.

Ether (Diethel)

Diethel ether is probably still the most widely used anesthetic agent in obstetrics. This is due mostly to its ease of administration and ready accessibility. Another distinct advantage is the respiratory stimulation produced by ether.

The disadvantages of ether anesthesia include (1) the long induction period, (2) inflammatory nature of ether, (3) nausea and vomiting and (4) heavy flow of salivary secretions.

Ether is indicated when muscle relaxation is desired or necessary—especially uterine relaxation for versions, breech presentations and Bandl's ring.

Contraindications for the use of ether include (1) where any general anesthetic is contraindicated, (2) high humidity, (3) fire hazards, (4) kidney disease, (5) upper respiratory infections, (6) increased intracranial pressure, (7) liver disease, (8) diabetes mellitus and (9) acidosis.

Because of the long and unpleasant induction periods with ether, the induction is preferably accomplished with nitrous oxide and oxygen and then a change to ether is made following the induction.

Cyclopropane

The advantages of the use of cyclopropane in obstetrics are (1) the non-irritating qualities in anesthetic concentrations, (2) induction and emergence are rapid, (3) no interference with the progress of labor in analgesic concentrations, (4) presence of a rich oxygen atmosphere, (5) the drug is potent, (6) lability of action of the drug and (7) the lack of ill effects on parenchymatous structures.

The disadvantages of cylopropane include (1) explosiveness, (2) does not stimulate respiration, (3) adrenalin is contraindicated, (4) labor is arrested with deep anesthesia (however, tone of the uterus is rapidly recovered), (5) the tendency to produce fetal hypoxemia in the presence of good material oxygenation, (6) the failure to produce good uterine relaxation and (7) cyclopropane is also contraindicated when cardiac conduction abnormalities are present.

Cyclopropane is indicated for cesarean section when there are no contraindications for the agent—however, no more than ten minutes should elapse from the time of induction with cyclopropane to the delivery of the infant because of fetal depression produced by prolonged cyclopropane anesthesia. Cyclopropane is also frequently used for the completion of an operation following the delivery of an infant under a conduction technic.

Nitrous Oxide

This agent has the distinct advantages of (1) being non-inflammable and non-explosive, (2) non-toxic, (3) ease of induction and (4) the relative absence of residual discomfort.

The major disadvantages are its relative impotence—affording no muscle relaxation and poor oxygenation.

The important indications for the use of nitrous oxide are (1) for induction prior to the use of more potent agents, (2) maintenance for short periods of time and (3) for the termination of anesthetic procedures.

TRICHLORETHYLENE

This agent has the distinct advantage of producing rapid (and not unpleasant) induction and emergence.

The disadvantages include (1) rapid decomposition in the presence of alkali to phosgene, dichlor-acetylene, and hydrochloric acid—thus, a change to another inhalation agent that requires the use of a soda lime carbon dioxide absorber cannot be made following the use of trichlorethylene, (2) severe burns to skin and mucous membranes, (3) it is difficult to get muscle relaxation without overdosage, (4) frequently stimulates excessive salivary secretions, (5) fibrillary muscle twitchings and (6) cardiac arrhythmias occur even in light anesthesia—thus, contraindicating the drug in cardiac disease.

The indications for trichlorethylene are (1) induction for ether when gaseous agents are not available, and (2) as an analgesic supplement to nitrous oxide, pentothal and such.

This agent should be administered by the patient only and by means of a special type mask. In this manner the patient can (because of the rapid action of trichlorethylene) effect analgesia for each contraction without the danger of overdosage.

OTHER INHALATION AGENTS

A few other inhalation agents, as ethylene and vinethene, are occasionally used in obstetrics, but due to the many disadvantages and the lack of major advantages over other agents the use of these agents is not believed to be indicated in obstetrics.

PENTOTHAL SODIUM

Pentothal "anesthesia" is used frequently for cesarean sections. The advantages are (1) ease and extreme rapidity of induction, (2) ample oxygen, (3) ready controllability, (4) minimal postpartum hemorrhage and (5) promptness of recovery without vomiting. Maternal laryngospasm and possible fetal narcosis are the major disadvantages of the use of pentothal for cesarean section. The latter complication rarely occurs if the fetus is removed and the umbilical cord clamped within eight minutes of the administration of the first dose of pentothal, for little of the drug traverses the placenta during the first eight minutes.

Pentothal is contraindicated when version and extraction are to be performed for the agent affords no uterine relaxation.

CARE OF THE NEWBORN INFANT

One of the major responsibilities of the obstetric team is, of course, to facilitate the initiation and maintenance of ventilation in the newborn infant. The infant's airway should be cleared as soon as the head is delivered. The infant should be held in a head down position during the first few minutes to facilitate the drainage of secretions from the tracheobronchial tree. If the infant's condition is depressed, proper resuscitation must be accomplished. Resuscitation should be instituted if (1) the heart rate is below 100 per minute or above 160 per minute or irregular for 60 seconds or more, or (2) if the infant fails to breathe spontaneously within one minute of birth.

The basic rules of resuscitation are (1) immediate aspiration of all secretions from the air passages and stomach, (2) administration of oxygen and elimination of carbon dioxide, (3) gentle and minimal handling, (4) maintenance of body temperature and (5) prevention of infection (antibiotics should always be used after difficult resuscitation). In addition, narcotic antagonists may also be administered if the depression is definitely known to be due to narcotic analgesics. However, it is believed that artificial respiration (mouth to mouth breathing is quite effective) is the treatment of choice for respiratory depression in the newborn infant. The use of contrast baths or traumatic physical stimulation by spanking, swinging or other archiac methods is to be condemned. The use of medullary stimulants is not only valueless but is detrimental in that they increase the oxygen need in an infant who already has inadequate oxygen.

SUMMARY

From the foregoing review of anesthesia in obstetrics, the following procedures, agents and technics appear to be indicated for the majority of obstetric cases.

The combination of seconal, scopolamine and apomorphine appears to be the agents of choice for premedication.

For routine, uncomplicated deliveries, a conduction block (as a spinal "saddle block" or peridural block) is preferred. With the need for an unconscious patient nitrous oxide, cyclopropane, or ether is indicated—depending upon other complicating factors.

In addition there are numerous complications of associated diseases in which the agent of choice must be selected with good medical judgment.

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THOMAS S. FLEMING, M.D., ***Moberly***

Clinical Note

How to Avoid Some Painful Hypodermics

THERE IS AN AREA in the upper arm which is least painful to subcutaneous injections. I decided this after giving myself numerous injections of pollen solution for hay fever.

It is well known that those areas which do not come in contact with other objects develop less nerve supply. For example, the palmar surface of the finger tip is much more sensitive to pain than the dorsal side. There is a small area from one to two inches directly above the lateral epicondyles of the humerus that has less nerve supply and is less sensitive to pain.

Most subcutaneous injections are given in the middle, postero-lateral surface of the upper arm. In this area, the nerve supply is abundant and injections are more painful.

Therefore I suggest the following: (1) Give all subcutaneous injections 2 cc. or less in this area. (2) Insert the needle slowly. Do not jab. (3) Inject all medication slowly. (4) Be gentle. Do not rush. Do not appear hurried.

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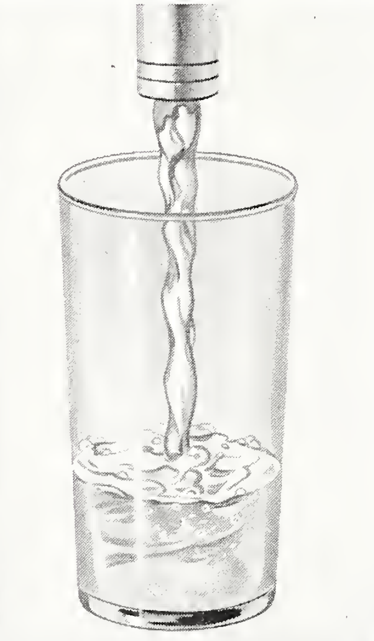

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A Special Article by **IRA D. LAYTON, M.D.,** *Kansas City*

The Dynamics of Blue Shield

Their Relationship to the Future of Private Medical Care

The underlying needs that prompted the creation of Blue Shield by the medical profession are outlined; the growth, success and problems that have been met, and the outlook for the future of private medical practice are discussed.

Dr. Layton is an internist in private practice in Kansas City. He became active in Blue Shield work about seven years ago and he has served on committees and as chairman of several committees. During the last year he has been First Vice President of the Kansas City plan and for the last two years he has been a member of the National Professional Relations Committee of Blue Shield Medical Care Plans.

This paper was presented at the National Professional Relations Conference of Blue Shield Medical Care Plans held in Chicago February 1-3, 1960.

Contrary to the opinion of many, Blue Shield did not spring fully armed like Athena from the brow of a medical Zeus to defend the world against socialized medicine. The existence of the profound depression had previously led medical leaders to explore the possibility of some form of prepaid medical insurance protection for both the patient and the physician. Those who worked through these unfortunate years will recall too well the instances in which needed medical care was not obtained because inability to pay weighed heavily on the consciences of many individuals. One also can recall quite well instances in which physicians were forced to turn to other occupations in order to augment their greatly diminished incomes. Some means of protection for both parties had to be devised.

The insurance companies, at this time, refused the job on any scale as broad as that proposed. Others, notably in Washington, became aware of the need for medical care in large segments of the population. The new federal paternalistic philosophy was gaining momentum. Finally, the threat of Messrs. Wagner, Murray and Dingle rallied support of virtually all physicians behind those who proposed the development of programs which became Blue Shield. Throughout the country, these plans began in the interest of the public and consequently for the benefit of the profession. The many hours of thought spent by concerned individuals in the early planning led to cautious beginnings while knowledge was developed concerning the relationship of premiums to utilization. Public acceptance of even these limited programs was instantaneous and far exceeded all expectations. As success became obvious, the scope of benefits was broadened and always the same enthusiastic public response was met. In recent years, the greatest compliment has been paid to the achievement of Blue Shield. The commercial companies, who originally rejected the plans as ill-advised, have entered the field in a highly competitive manner. Rapid growth and competition have produced problems, but more will be said of this later.

Because these plans developed at the local level and independently, there were variations between the programs, primarily of a fiscal nature; differences in fee schedules, full payment versus indemnity and scope of benefits, to mention a few. Four major philosophic principles were, however, common to all. These I would list as follows: (1) The programs were developed in the public interest to be made available to all of the public within the limits of reasonable insurance principles and at a common community rate; (2) the programs were representative of the profession in the locality served; (3) the programs were dedicated to the principle that the patient-doctor relationship must not be disturbed by their existence; and (4) the programs were limited in their efforts to the economic aspects of medicine and avoided influence in the normal practice of medicine.

Certainly Blue Shield programs everywhere were originally established with the public interest at heart. The nonprofit nature of these organizations bear witness to the fact. The vast majority of Blue Shield plans include on their governing board individuals who are there to represent the public. Originally fee schedules were devised whether on a service or indemnity basis at levels that would provide satisfactory payment to the majority of doctors for much of the population. The broad coverage of members of the community, the acceptance of all reasonable risks, the provisions for group conversion and the development of individual enrollment programs have all been evidence of the profession's intention to provide the best possible services for the subscribers.

Unfortunately the success of these programs was so great that in many areas little effort was made to keep pace with the times. Through the years, fee schedules became inadequate to meet the needs of the public. This led to criticism from both the public and the profession and in virtually all areas efforts are under way to correct this inequity. In recent years, the development of competition from the commercial companies has changed the relationship between Blue Shield and the public it serves. Health and welfare issues, now having been admitted to the bargaining tables as proper fringe benefits, are too often largely a matter of dollars and cents and not a matter of service required or provided. Both management and union leaders are eager to sell to their employees and members the belief that something special has been the result of bargaining sessions. When commercial carriers are used, too often it is found that the pennies provided purchase a fairly good surgical schedule, but when the employee has medical illness, little or no benefits are available. All are familiar with the surgical fee schedule of the commercial company which in a footnote states: "all unlisted procedures will be paid at $5.00." The availability of such programs has had an adverse effect on the growth of Blue Shield in recent years. The subscriber too often has no voice in determining what product will be purchased and he knows not until the need is present how inadequate his coverage may be. The development of commercial competition has produced other problems. As said before, Blue Shield wishes to cover as much of the community as is feasibly possible. Such coverage must inevitably include poor risk individuals. Prior to the development of competition, a community rate took care of good and poor risks alike. Now one finds that Blue Shield, not infrequently, loses desirable group contracts, even on a nonprofit basis, to commercial companies who can write for that group alone at a lower rate and show a significant profit. Continuation of this trend will leave Blue Shield priced out of the market for those who need it most and whom the commercial companies will not cover. It is certainly true that the magnitude of Blue Shield growth and the development of commercial competition have created present problems despite Blue Shield's sincere public interest. These problems must be solved or they will be intensified.

What of the relationship between Blue Shield and the medical profession which created it? Certainly in the beginning this relationship was good. Blue Shield provided income for services where income otherwise might not have been available. Blue Shield has been and continues to be the most effective defense against the inroads of agencies who wish to insert themselves into the practice of medicine. Over the years, many factors have tended to discourage this excellent relationship. First and foremost of these probably is prosperity. Much less often now does the physician have to worry about his patient's ability to pay a reasonable fee. The reception rooms are filled with patients who are well acquainted with wonder drugs, the ravages of cancer and the dangers of heart disease. Relative affluence has led many physicians to believe that Blue Shield is no longer an economic necessity and interest in the program in many areas has waned. The unforeseen success of Blue Shield has made it difficult for administrative staffs and governing boards to keep the physician informed of their problems and decisions have been made without soliciting the opinion of the profession in general. A gradual parting of the ways has occurred between busy doctors with little time for Blue Shield and a busy Blue Shield personnel with little time for professional relations. Physicians began to look upon Blue Shield "just another insurance company" and to wonder why they, as physicians, were engaged in insurance practices. As physicians' fees increased to make up for mounting overhead and costs of living, too often Blue Shield fee schedules remained static. The Blue Shield subscriber who felt he had purchased a high-grade "doctors' plan," found in his mail a supplemental bill from his physician and was understandably irritated. Criticism was directed toward the physician and the physician, in turn, reflected it upon the inadequate payment of his Blue Shield plan. Subscriber and physician alike sometimes found that commercial returns were far more adequate for certain procedures. The progress of medicine with increased specialization and differentiation of fees between the general practitioner and specialist, particularly those engaged in the nonsurgical specialties, has in recent years produced an extremely difficult situation. Resentment engendered by all these factors has often been great. A new generation of physicians unfamiliar with the background of Blue Shield and unversed in Blue Shield philosophies, has been highly critical of the programs. They look on Blue Shield as another interfering agency in their relationship with their patient. Blue Shield was created to represent the profession in economic affairs with the public. For numerous reasons, some of which I have mentioned, we have not kept faith with that particular trust.

The third philosophic concept, that Blue Shield should not interfere in patient-doctor relationship, is proper but extremely naive. Blue Shield was initially intended to serve as a depository for funds to be disbursed to the physician for services rendered to the subscriber. In such an arrangement, there would seem to be little opportunity for interference on the part of Blue Shield and it is true such interference is never intended. Rapid growth, with sales to large groups, results frequently in the subscribers having little knowledge of the limitations of the contract he has purchased. The existence of funds in the form of Blue Shield inevitably alters the patient's attitude toward the expense of medical care and must have a similar influence upon the physician. Pressures are brought to bear to provide services under circumstances which will "utilize insurance" and spare the individual out-of-pocket expense. This must inevitable affect the economic aspects of the patient-doctor relationship and in turn have some bearing on the manner in which medical care is provided. Although not the intent, this is a by-product of Blue Shield or any program which undertakes to provide benefits earmarked for a specific purpose. Demands for unnecessary services, requests for unnecessary hospitalization and insistence upon the utilization of unnecessary technics by either patient or physician produce stresses which wear thin the professional relationships of Blue Shield. One must recognize that the existence of Blue Shield or of commercial insurance as well, does have an effect upon the economic aspect of the patient-doctor relationship and these, in turn to some extent, will be reflected in their personal relationship.

The fourth philosophic principle, that Blue Shield must not influence the practice of medicine, is also quite laudable. Again, however, it is inevitable that certain aspects of the practice of medicine will be influenced to some extent by economic factors. The existence of funds designated for that purpose make elective surgery more readily elected. The existence or non-existence of surgical assistant's fees will affect operating room personnel. The presence or absence of allowances for consultation will influence the frequency of consultation. Even the duration of hospital stay will be influenced to some extent by the existence of funds to pay for additional days. Such allowances may provide for adequate care where the absence of funds might mean substandard treatment. On the other hand, the existence of such funds also invites abuses. Fee schedules agreed to by significant numbers of the profession must certainly influence the patient's evaluation of the worth of his physician's services. The inclusion or exclusion thoughtlessly of certain benefits will influence to some degree the manner in which medicine is practiced in a given area, and may in turn tend to lead the profession along pathways somewhat different from those it might have followed.

The effects of prepaid medical care on the doctor-patient relationship and on the practice of medicine, certainly so far as Blue Shield is concerned, are unintended. I am sure they were unforeseen by its founders and every effort is made to minimize these effects by governing boards. We must, however, recognize that they are there and anticipate them in future planning as well as assess their influence in the evaluation of present and past problems.

Throughout these foregoing comments, I have attempted to point out some philosophic bases on which Blue Shield was founded and to demonstrate at least some of the major influences in its development. To repeat, Blue Shield was created by the profession in the public interest. The unforeseen numbers of purchasers have made it almost a public trust. Blue Shield was never intended to serve solely for the doctor's benefit at the expense of the public. Had this been true, socialized medicine would have been here long ago. Blue Shield was meant to represent the profession as a fiscal arm, not necessarily to augment the income of physicians, but to help insure that a significant portion of the population would be in a position to pay proper medical bills. Certainly, it has never been the intent of Blue Shield to affect either the manner in which medicine is practiced or the relationship between the doctor and his patient.

What now of the future? No one can doubt but that prepaid medical care is here to stay. It will remain on a voluntary basis if we can solve our problems. It will be here on an involuntary basis if we cannot. We must meet the competitive threat of the insurance industry in part through dollar competition, but more importantly through education of the leaders of management, labor and civic organizations. They must be shown that Blue Shield was provided by the medical profession for the public welfare, and that as such it is not in itself a member of the insurance industry. They must be convinced that only through Blue Shield and the medical profession can the problems of medical care for the aged, the indigent and other poor risk groups be adequately met except by the extravagant intervention of the federal government. They must be constantly reminded that a few pennies increase in monthly dues provides not only higher quality protection for those whom they represent, but also is a contribution for the medical welfare of those groups shunned by organizations who hold profit as their reason for existence. Failing in these attempts, Blue Shield must be ready to employ economic competitive procedures such as experience rating, and segmentation of benefits in order to maintain good risk contracts, and to expand into other desirable groups not previously covered. Only through these means can we continue to serve the community as a whole at a rate which the community can afford. The voice of the public is readily heard, and what John Q. Public wants he usually gets one way or another. Certainly the requests of the public for increased scope of benefit, more complete coverage by fee schedules whether service or indemnity will be met and must be met by the doctors' plan if the practice of medicine is to survive in its present form.

Blue Shield cannot long exist without the support of the medical profession. Similarly the independent practice of medicine cannot long exist in the absence of Blue Shield. They are in truth mutually dependent. Too many of the profession have forgotten and others have never learned Dr. Feierabend's oft quoted "principle of subsidiarity," which may be summed up as follows: "When there is a social problem the solution of that problem must be provided by the lower and better qualified groups. If this group either cannot or will not meet its obligation, it becomes the responsibility of the state to do so." Blue Shield is the instrument of the lower and better qualified group, namely the medical profession.

Individual members of the profession must be reminded of the continued integrity of purpose of Blue Shield. More of them must be brought into participation at an active level through committee membership, and service on advisory groups.

We must not forget that Blue Shield represents the entire profession, and must not let itself be led by the efforts of organized minorities into actions which are favorable only to those minorities. Those changes in Blue Shield programs which are acceptable to the profession as a whole and which meet the public need, must be enthusiastically embraced. Those which would benefit a segment of the profession only must be avoided with equal enthusiasm. To this end closer liaison with organized medicine at the local level is essential. Communications between state and county medical organizations and their component, Blue Shield plans must be increased. We must realize that Blue Shield inevitably will influence at least on the economic side the practice of medicine and the patient-doctor relationship. We must insure, through consultation with organized medicine and thoughtful consideration on the part of Blue Shield governing boards, that these influences will not adversely affect the art and science of medical practice.

It is to the everlasting credit of the medical profession that Blue Shield was created. The scientific senses of medicine have become so acute and so constantly used that little time is left for the development of economic acumen. Blue Shield must serve as eyes to see the danger arising from a vocal minority of the profession who would maintain the status quo in the face of economic change. It must be the ears to hear the murmurs of the public before they become a roar. It must be the tongue to savor the sweet and sour of economic change before the bite is swallowed. It must be the nose to detect the aroma of the social planners and bureaucrats who would, for selfish interests, deposit their offensive socialistic excrement on public and profession alike. Blue Shield must be the touch kept gently and reassuringly at the public wrist, alerting the profession through the axones of communications to impending needs.

535 Argyle Bldg.

R. O. Muether, M.D.

President's Message

A resolution passed by the House of Delegates at the 1960 Annual Session called for a broad public service program by the Association, emphasizing to the public the ability of the medical profession to take care of the medical problems of today without interference by federal agencies, or legislation of the Forand type.

A committee of the Council was appointed by the President to formulate and plan this program. This committee has been studying plans and has asked the cooperation of the component medical societies. The committee realizes that this must be a local program in that each community will have different ways in seeking to demonstrate to the public that the physician will take care of medical needs. Therefore, committees in the county medical societies will be a key factor in organizing on an effective basis, providing information to the public and, in some cases, perhaps even helping to establish some needed phase of handling health care. The state committee will work closely with the county committees.

But the first step is to have the committees functioning in the county medical societies and I urge any member who is asked to serve on his local committee to give his active support to carrying forward this most important program.

R. O. Muether M.D.

EDITORIALS

HE WOULDN'T TELL ME ANYTHING

Two editorials appearing recently in *St. Louis Medicine,* the publication of the St. Louis Medical Society, are felt to be of value to all members of the Association and, by permission, are reprinted.

"When we learn that we have lost a patient to another physician too often we shrug our shoulders and say to ourselves 'Good riddance! Must be a doctor shopper.' In thus protecting our ego we may fail to realize that we have lost this patient because we have not taken the time to educate him.

"People change doctors for a variety of reasons. Some are indeed shoppers and will never find the impossible combination of personality factors they are seeking in a physician. Some become dissatisfied with spending long hours in our waiting rooms. Some are unhappy about fees. A substantial number, however, have become fed up because their doctor wouldn't talk to them; wouldn't explain matters in simple language.

"We have heard our colleagues give several reasons why they don't like to talk to patients. Most of the reasons boil down to two basic themes: 'I don't have the time,' and 'they wouldn't understand it anyway.' These arguments ignore our often expressed desire for better public relations, and they ignore the public's level of interest in things medical.

"Reference to the information given in any issue of the *J.A.M.A.* will reveal the tremendous number of medical topics appearing in weekly and monthly magazines. Every daily paper has a medical column. Sunday papers have special medical articles. It is useless to point out to publishers and readers that the articles often do more harm than good. Let us accept the fact that people are reading them and remembering the viewpoints expressed, many of which are erroneous or only half-truths. Our patients want to know more, particularly so when the discussion refers to symptoms they themselves have experienced.

"Personally we believe that a well informed patient is a more cooperative patient, and therefore likely to benefit more from our treatment. If this is true we can do a public service, and consequently better our public relations, by taking time to talk to our individual patients in language they can understand. J. L. H."

THE VISITING NURSE

The second editorial follows:

"Although the Visiting Nurse Association of Greater St. Louis has been in operation since 1911, many physicians do not utilize its exceptional services and not a few physicians are unaware that the services are available.

"In these days of crowded hospitals, lengthening life expectancy, increasing chronic disease rates, and emphasis on rehabilitation, the visiting nurse is the vital ingredient to satisfactory home care. In the past two decades there has been so much talk about enlarging hospitals, improving nursing homes, building chronic disease hospitals and the like, that little attention has been paid to what can be done at home for the invalid or semi-invalid patient.

"In a quiet sort of way and with very little tub thumping the Visiting Nurse Association has been providing metropolitan St. Louis with trained nursing personnel who go into the home, working under physicians' instructions, and bringing confidence to the patient and family that good care is as possible in the home as at the best of hospitals.

"The visiting nurses' services are available to all. Those who can pay do so. No one is denied their services. Service is free to those unable to pay. At the same time treatments are given only at the direction of registered physicians. Mothers are taught to care for the newborn. The paralytic is taught to utilize his remaining resources for self care. The diabetic is instructed in the technic of injection. The post-colostomy patients are shown how to reduce their disability to a minimum. Perhaps of greatest importance, the family not previously confronted with the problem of invalid care are shown the simple technics of home nursing.

"The Visiting Nurse Association is a nonprofit organization receiving about 70 per cent of its support from the United Fund. Presently the organization has 25 registered nurses and five licensed practical nurses. Utilized to the extent it deserves and receiving proper support, its activities could well be expanded three to fourfold without actually covering the problem in the St. Louis area.

"Anyone feeling that 'Charity begins at home' should experience complete satisfaction in supporting the Visiting Nurse. R. W. K."

WATCH OUT!

The following editorial appeared in the April issue of the *Virginia Medical Monthly*, and is reprinted with permission of that journal and Dr. Bedsaul.

"It is quite possible the powers that be in Washington have more than one reason for complaining about the prices of drugs. Senator Estes Kefauver's drug price investigating subcommittee would have us believe that the government's sole interest is 'simply with the price of drugs—a price which must be paid by someone under any system of medical care.' I think there is a psychological reason which they hope to keep under cover. This Senate antitrust investigation is just another cunning approach in the attempt to slip socialized medicine in at the back door. It appears to me that Mr. Kefauver almost gave this fact away in his opening statement when he said: 'It is not the purpose of these hearings to question in any way the American system of private medical practice.' I react to this statement in the same manner I would if a small boy should rush into my office and exclaim: 'Doctor, someone batted a baseball through your back window—and I don't want you to think that I did it.'

"If these investigators' thoughts were just in the drug field, they should also be concerned about quality as well as price. They certainly have shown a lack of interest in the cost of pharmaceutical research and manufacturing, and without research drugs would soon degrade in both quality and quantity. The Senator's line of reasoning in advocating that druggists be allowed to use generic instead of brand names, would throw the drug business into a tail spin within a short time. If one company spends a million dollars to produce a new drug, and another concern is allowed to copy the formula, pay none of the research cost, and market the product at a low price, the results would be disastrous. The better firms would go broke, initiative to find new drugs would be smothered and we would find ourselves advancing in reverse—back toward the 'Calomel and castor oil days.'

"I feel that these government probes are motivated, primarily, for publicity. If they can attract enough attend by their investigations of the major drug manufacturing firms, and lead American people into believing that the prices of drugs are too high, it might be possible to gain a large number of sympathetic listeners.

"They hope to stir up enough interest in the drug controversy to swing the spotlight away from the doctors for a while, give us a breathing spell, make us feel complacent and lessen our vigil against legislation like the Forand bill. It is their wish that we don't get wise to their twofold purpose of these investigations in relation to the Forand bill itself. First, they will attempt to convince the lay public that older people, on social security, will not be able to pay the high drug prices—and that the government should step in to help. Second, if these tactics could get a Forand type of legislation passed without enough medical publicity to stir up strong opposition—they would be in position to widen social security to cover everybody. Then we could have socialized medicine under another name.

"People, consciously, or unconsciously, associate drugs and physicians together. An aroused populace against drug prices would not be too friendly toward the medical profession. Such a situation would gain recruits for a more effective battle against the free practice of medicine. While we sit on the side lines, apparently unmolested, and watch the steam roller attempt to crush the drug firms, we must remain alert. We could get caught napping like Hitler did one time during World War II—when the Allied soldiers were issued heavy, long-handled underwear. As soon as the Germans got wind of it, they rushed up to Norway while our troops poured into Africa. It behooves us to watch out for all sorts of misleading tactics, because this drug battle is only a sham attack. The medical profession is their chief objective. They hope to find time to reorganize their forces, turn upon us without warning and launch a surprise attack where and when we might least expect it.

F. Clyde Bedsaul, M.D."

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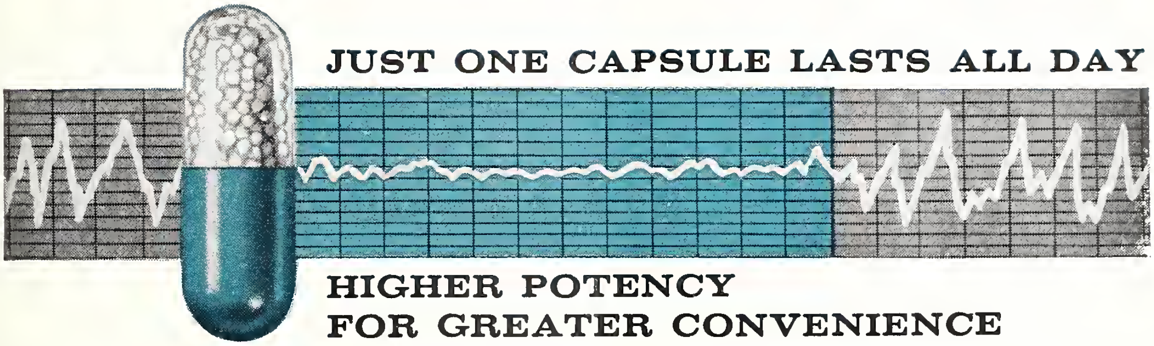

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CME-8426

Ramblings of the Field Secretary

The St. Louis County Medical Society has recently embarked upon an expanded public relations program. Ten specific objectives have been set forth as follow:

1. To render financial assistance in worthwhile community-wide health, public welfare and educational ventures.

2. To provide study, analyses and reports regarding the proposed legislation in school districts, county, state and nation and to support or oppose legislation as indicated.

3. To provide for the publication and distribution of information designed to make life longer and more comfortable.

4. To provide for coverage of and participation in public relations conferences, meetings and discussions in which additional ways of servicing the public are exchanged.

5. To stimulate cooperation with sister societies in joint medical programs and other related items.

6. To furnish assistance to allied organizations in programs aimed at better health and welfare standards for the public.

7. To give assistance in programs directly concerned with the exposure of cultists, faddists, frauds and quacks.

8. To provide some compensation for those whose services are contributed far beyond the call of reasonable gratuitous service to the community.

9. To provide for the close observation of those in public office and the encouragement of members of the profession to take more interest and active part in municipal, county, state and national affairs.

10. To develop miscellaneous local activities designed to promote and establish a favorable climate for organized medicine in the minds of all the people even before the need for professional services are indicated.

A $10.00 per year assessment per member for the next three years has been approved by the Society to support the program. A certain percentage of the assessment is to be earmarked for the cooperative purchase, with the St. Louis Medical Society, of the Transparent Woman which will be displayed at the St. Louis Academy of Science. The "Woman" on order from the Gesundheit Museum in Cologne, Germany, is expected to be delivered to the local museum early next year.

Implementation of this laudable program has already begun. A speakers' committee has been organized consisting of a majority of the 450 members of the Society. Members of the committee will appear, upon request, before church, school, service and veterans groups, to discuss subjects ranging from better health for school children to the care and treatment of citizens past 65.

The Society adopted, at its meeting on April 13, a comprehensive health program for preschool and school children. The proposed program was developed by the Society's school health committee in cooperation with the Cooperating School Superintendents Association and the Lutheran and Catholic School Administrators of St. Louis County, the County Health Department, and other interested groups. The objectives of the program are to assist parents in keeping their children healthy and to improve the child's health while he is in school. These objectives will encompass various immunizations, periodic physical examinations, proper health and medical records for each child at the school, plans for handling emergency illnesses and accidents at school, establishment of policies and procedures for communicable disease control, handling of physical examinations for sports programs and having a physician present for sport contests, especially at football games with other schools.

Hats off to this Society and particularly to those who have been the steering force behind this projected extensive public service program.

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News—Personal and Professional

The Mid-Central States Orthopedic Society installed **D. L. Yancey,** M.D., Springfield, as president at a meeting in Wichita on April 10.

Speakers at a meeting of the Fourth District Missouri Nurses Association at Springfield on March 16 were **Durward G. Hall,** M.D., and Mr. John Buckner, Springfield.

At a town hall meeting held at State Hospital No. 1, Fulton, in March, **Thorpe Ray,** M.D., Columbia, was one of the speakers. His subject was "Health and Medical Care, Including Rehabilitation."

"The Circulatory System" was the subject of a talk by **Charles Wilson,** M.D., Cape Girardeau, at a March Rotary meeting in Cape Girardeau.

The Missouri Dietetic Association had as speaker at a meeting in March **Thomas W. Burns,** M.D., Columbia, who spoke on "Parathyroid Disease."

A meeting of the Lawrence County School Health Council was addressed at a meeting in Mount Vernon by **C. A. Brasher,** M.D., Mount Vernon, who described the tuberculosis testing program.

The humorous and serious experiences of a physician were related by **C. H. Cullers,** M.D., Trenton, at a Lions Club ladies night dinner meeting in late March.

At a special meeting on cancer held at the Monett City Hall in March, speakers were **Frederick C. Coller,** M.D., and **M. Wendell Dietz,** M.D., Springfield.

The Rotary Club of Lamar heard a talk on "How Men Win Against Cancer" by **Terry E. Lilly, Jr.,** M.D., Kansas City, at a meeting late in March.

About 50 former resident physicians of St. Louis Maternity Hospital honored **Willard M. Allen,** M.D., St. Louis, on the twentieth anniversary of his becoming head of the department by a program in the afternoon and a dinner at the University Club on April 2.

Cancer was the subject of a talk by **R. B. Wray,** M.D., Nevada, before the Nevada Rotary Club on March 31.

The Missouri Chapter of the National Cystic Research Foundation, at a meeting in Kansas City on April 12, had as speaker **Wayne Hart,** M.D., Kansas City.

Following the showing of the film, "The Cancer Challenge to Youth," at Grandview High School on April 5, **G. Neill Berry,** M.D., Kansas City, spoke on "Historical Cancer Detection."

At a meeting of the Southwestern Surgical Congress in Los Vegas March 28 to 31, **Claude J. Hunt,** M.D., Kansas City, gave a paper on "The Superior and Inferior Laryngeal Nerve as Related to Thyroid Surgery."

The American College of Obstetricians and Gynecologists elected **A. N. Arneson,** M.D., St. Louis, treasurer at a meeting in Cincinnati, Ohio, on April 4.

Presiding at a meeting to review the tuberculosis control program in Laclede County was **J. H. Summers,** M.D., Lebanon, president of the Laclede County Tuberculosis Association.

A 50 year membership pin was presented to **C. W. Kirk,** M.D., Hopkins, by the Xenia Lodge No. 50, AF and AM at the Hopkins Masonic Temple on April 20.

General chairman of a drive to raise $100,000 for a new home for the Boys' Club of St. Charles is **Russell J. Crider,** M.D., St. Charles.

The *Springfield News-Leader* on April 3 carried a picture of **J. H. Summers,** M.D., Lebanon, and a story of his life and pointing out that he is President-Elect of the Association.

Geriatric and chronically ill patients respond within a few days. Thanks to your prompt treatment and the smooth action of Deprol, her depression is relieved and her anxiety calmed—*often in two or three days.* She eats well, sleeps well and her depression no longer complicates your basic regimen.

Lifts depression...as it calms anxiety!

For geriatric and chronically ill patients— a smooth, balanced action that lifts depression as it calms anxiety...rapidly and safely

Balances the mood—no "seesaw" effect of amphetamine-barbiturates and energizers. While amphetamines and energizers may stimulate the patient—*they often aggravate anxiety and tension.* And although amphetamine-barbiturate combinations may counteract excessive stimulation—*they often deepen depression.*

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Acts swiftly—the patient often feels better, sleeps better, within two or three days. Unlike most other antidepressant drugs, Deprol relieves the patient quickly—often within two or three days.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Buchanan County Medical Society

Dr. Claude J. Hunt, Kansas City, addressed the April 6 meeting of the Buchanan County Medical Society on "Personal Approach to the Surgical Management of Malignant Lesions of the Stomach and Colon." Dr. Hunt is president of the Missouri Division of the American Cancer Society. Dr. Thompson E. Potter, president of the Society, presided.

The speaker was introduced by Dr. Paul A. Knepper. Fifty-five doctors from St. Joseph, Northwest Missouri and Northeast Kansas attended the dinner and program.

Included in the business portion of the meeting was approval of a motion authorizing the president to appoint a "Committee on Aging" to make a study, plans and recommendations for Society activity on a local level in this field.

William B. Rost, M.D., *Secretary*

Grand River County Medical Society

Some 50 people including doctors, their wives and guests attended a dinner meeting of the Grand River Medical Society on Thursday evening, April 14, at the Strand Hotel in Chillicothe.

Dr. Anderson addressed the group.

After an enjoyable social hour and buffet dinner, the ladies retired to a separate meeting room for their special program.

The doctors were privileged to hear an interesting discussion on "Pediatric Emergencies" presented by Raymond Anderson, M.D., Kansas City. This scientific program was furnished by the Society's program committee in cooperation with the Missouri Academy of General Practice.

After the scientific program a business session was held. Dr. Robert Smith, Marceline, president of the Society, brought up "The Hospital Story" which the Missouri Hospital Association is promoting for inclusion in the curricula of many grade and high schools in Missouri. A resolution opposing the promotion of this material in the schools was unanimously passed with a copy of it to be sent to the Missouri Hospital Association.

The Society and Auxiliary held separate sessions.

Dr. Donald Dowell, Councilor of the First District, discussed the program that the Council of the State Medical Association is considering to implement the resolution passed by the State Association House of Delegates in March for an expanded public information and service program.

Mr. Ray McIntyre, Field Secretary of the Association, was present to participate in the discussion. The meeting adjourned at 10:30 p.m.

B. D. Howell, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

J. J. WIMP, KIRKSVILLE, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

The April meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held at the Woodland Hospital in Moberly on Thursday night, April 14. Stoughton F. White, M.D., Kansas City, spoke on, "The Management of Urological Problems in the Doctor's Office."

Dr. White stressed making complete diagnostic studies of the prostate, bladder and kidneys when symptoms first arise. He stated that there are many cases in which kidneys could have been saved, stones prevented, and chronic infections avoided if good diagnostic studies had been carried out early and proper corrective measures conducted.

The following physicians were present to hear Dr. White's excellent presentation: Drs. Josephine Baker, W. D. Chute, C. C. Cohrs, J. W. Fleming, T. S. Fleming, A. P. Rowlette, C. C. Smith, S. R. Szymanski, and R. H. Young, Moberly; G. C. Rice, Brunswick; C. C. Weger, Keytesville; J. E. Campbell, D. E. Eggleston, H. Miller and Carl Rinker, Macon; F. A. Barnett and G. M. Ragsdale, Paris; and G. W. Hawkins, Salisbury.

Josephine Baker, M.D., *Secretary*

Marion-Ralls-Shelby County Medical Society

A dinner meeting of the Marion-Ralls-Shelby County Medical Society was held at the Mark Twain Hotel in Hannibal on Tuesday night, April 19.

Following a social hour and dinner, Dr. Richard Yore, St. Louis, presented an interesting and informative discussion on "The Management of Injuries to the Chest."

Wyeth Hamlin, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Lincoln-St. Charles County Medical Society

A dinner meeting of the Lincoln-St. Charles County Medical Society was held Tuesday night, April 12, at Station Duquette, St. Charles. A short social hour preceded dinner.

The scientific discussion for the evening was presented by Frederick W. Witt, psychiatrist of St. Louis, who spoke on, "Psychiatry as Related to the Community." This provocative subject was well handled by Dr. Witt.

Paul Rother, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

BYRON M. STUART, BOONVILLE, COUNCILOR

Audrain, Callaway, Montgomery County Medical Societies

A joint dinner meeting of the Audrain, Callaway and Montgomery County Medical Societies was held Tuesday night, April 19, at the Country Club in Mexico. The evening festivities began with a social hour followed by a bountiful dinner and the program.

The speaker for the evening was John C. Doubek, Jr., M.D., St. Louis, who spoke on "Peripheral Vascular Disease." This is a subject of considerable interest in medical circles today, and it was well presented by Dr. Doubek.

Ned D. Rodes, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

West Central Missouri Medical Society

The April meeting of the West Central Missouri Medical Society was held at the Country Club, Nevada, on Thursday evening, April 14. The usual social hour preceded our scientific program and business meeting.

Following the social hour we were served those usual delicious Nevada Country Club steaks which were enjoyed by all. Our guests for the evening were our good friend of Wyeth Company, contributors to our PG Academy Programs, and Dr. Mark Marks and wife from Kansas City.

After the dinner hour Dr. Marks spoke on an interesting and timely subject, "The Acute Ano-Rectal Problems of General Office Practice." Dr. Marks is a teacher of medicine and always makes a splendid talk on his subjects. His versatile manner of teaching was well demonstrated during the social hour get-together through his dissertation on enemas which unfortunately only a few of us, who were in the circle talking, heard. Sugar and water is the enema of choice for the human bowel and, if not that, then plain saline solution.

At the close of the scientific program the Society continued with its business meeting. Correspondence was taken care of by the secretary who read the minutes of the last meeting which were approved as read.

Dr. Barger spoke about the recent state meeting and made special reference to the Forand Bill which has been held in committee, but warned that we would have to be ready to work against other bills which would be prepared by both parties on the subject at hand. With no further business the meeting adjourned.

Those present were Dr. and Mrs. H. A. Tracy, Belton; Dr. O. B. Barger, Harrisonville; Dr. and Mrs. Robert Brownsberger, Appleton City; Dr. Elmer Taylor, Lockwood; Dr. and Mrs. Robert Magee, Eldorado Springs; Dr. Claude Allen, Rich Hill; Dr. C. W. Luter, Butler; Dr. Roy Pearse, Dr. Braxton Davis, Dr. and Mrs. F. L. Martin, Dr. James Pascoe, Dr. L. P. McCann, Dr. Paul Barone, Nevada.

Carter W. Luter, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Jasper County Medical Society

A regular meeting of the Jasper County Medical Society was held on April 12, at Henry's, Joplin.

A quorum being present, in the absence of the president, I. T. Craig, M.D., the meeting was called to order by the vice president, J. W. Koehler. Thirty-eight members were present.

Upon motion duly made and carried the minutes of the preceding meeting were approved without a reading thereof.

Dr. S. W. Scorse, as delegate, reported on the annual State Association meeting held in St. Louis. Dr. Tom McNew discussed the AMA Educational Fund and the nature of participation of Missouri physicians in this effort.

The meeting was then turned over to the program chairman, David O. Allen, M.D. Dr. Thomas F. Dilday introduced the speaker of the evening, Ben Heller, M.D., professor of medicine at the University of Arkansas Medical Center, whose topic was "Renal Function in Health and Disease."

There being no further business, the meeting, upon motion duly made and carried, adjourned.

David Allen, M.D., *Secretary*

Ozarks Medical Society

The Ozarks Medical Society met at the Rainbow Dinner House in Cassville on April 12, at 7:30 p.m. Twenty-five members and Auxiliary members were present. The ladies stayed to enjoy the program presented by the publisher of the Cassville paper on his hobby of "Early History of the Settling of Our Seven County Area," including pertinent facts concerning early medical practice. This was well received.

A short business meeting followed, at which it was reported that replies had been received to the resolution that the Society had forwarded to Representatives and Senators, in opposition to the Forand Bill.

A. J. Graves, M.D., *Secretary*

Greene County Medical Society

A meeting of the Greene County Medical Society was held Wednesday, April 6, at the Holiday Inn in conjunction with the 5th Annual Ozark Empire Cancer Conference.

Forty-eight members of the Society and 37 guests were present. The program began with a luncheon at 12:30 p.m. with Dr. M. D. Bonebrake, Chairman of the Cancer Control Committee, presiding.

Following luncheon, the following papers were presented. "Metastatic Lesions of the Breast" presented by Dr. Nylene Eckles, Chief of the Medical Breast Service, Department of Medicine, University of Texas M. D. Anderson Hospital and Tumor Institute.

"Medical Treatment of Cancer and Research in the M. D. Anderson Hospital," presented by Dr. Clifton D. Howe, Professor of Medicine, University of Texas Postgraduate School of Medicine and Head of the Department of Medicine, University of Texas M. D. Anderson Hospital and Tumor Institute.

"Cancer of Exposed Areas" presented by Dr. Marga Sinclair, Chief of Plastic Surgery Service, University of Texas M. D. Anderson Hospital and Tumor Institute, and Associate Professor of the Postgraduate School of Medicine, University of Texas.

"Cancer in Children," presented by Dr. Wataru W. Sutow, Associate Pediatrician, University of Texas M. D. Anderson Hospital and Tumor Institute, and Associate Professor of Pediatrics University of Texas Postgraduate School of Medicine.

The Conference dinner was held at 6:00 p.m. with Dr. Walter W. Tillman, Jr., President of the Greene County Medical Society, presiding. Dr. Tillman welcomed the out of town guests to the meeting. The business portion of the meeting of the Greene County Medical Society was waived until the April 29 meeting and by unanimous consent the minutes of the February meeting of the Society were approved as published in the *Bulletin*.

The President turned the meeting over to Dr. Clifton D. Howe who moderated a question and answer panel discussion program for the evening.

Upon conclusion of the program, Dr. Tillman expressed appreciation to the panelists for making the trip to Springfield and for their excellent program during the afternoon and evening. He also expressed the Society's thanks to Drs. M. D. Bonebrake, Jerry H. Allen, Charles E. Lockhart and R. Ned White, members of the Cancer Control Committee, for making arrangements for the program.

President Tillman reminded those present that the April meeting of the Greene County Medical Society will be held April 29 at The Platter.

There being no further business, the meeting was adjourned.

F. T. H'Doubler, Jr., *Secretary*

NINTH COUNCILOR DISTRICT

J. H. SUMMERS, LEBANON, COUNCILOR

Mid-Missouri County Medical Society

Members of the Mid-Missouri County Medical Society and their wives held a dinner meeting in the New Munger Moss Restaurant in Lebanon, on Thursday night, April 28.

The program for the evening was given by the President-Elect of the Missouri State Medical Association, J. H. Summers, M.D., Lebanon. Dr. Summers gave a stimulating talk on, "New Horizons in the Missouri State Medical Association."

This Society is most proud of Dr. Summers and feels that we are fortunate to have him in his present capacity of leadership at this important time in medicine's history.

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler-Ripley-Wayne County Medical Society

The Butler-Ripley-Wayne County Medical Society met April 13, at 6:30 p.m., at the Hickory House with Dr. Fred Kneibert, vice president, presiding.

The theme of the program was "Legal Medicine." Films were obtained for viewing by the Society, and discussion of the films was carried out by Circuit Judge Phillip Terry along the legal aspects of medicine.

The members of the Society received this program well and many questions were brought forth by the discussion.

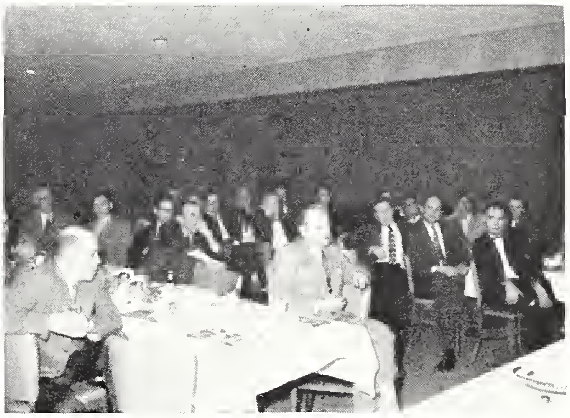
The meeting was adjourned at 10:00 p.m.

E. T. Hansbrough, M.D., *Secretary*

Cape Girardeau County Medical Society

The regular monthly meeting of the Cape Girardeau County Medical Society was held on Monday evening, April 4, at the Colonial Tavern. The evening festivities consisted of a social hour, dinner, the scientific program and a short business session.

Dr. Hampton was seated with Society officers.



The 35 members of the society present were privileged to hear Stanley F. Hampton, M.D.,

(*Continued on page 748*)

Recent JAMA editorial statement clarifies the current controversy about dietary fats

Excerpted from the March 12, 1960, issue of The Journal of The American Medical Association:

“It is accepted generally that specific alteration in the diet will lower the concentration of cholesterol in the blood. The most effective results to date have been achieved by increasing consumption of polyunsaturated fatty acids, particularly linoleic acid. However, indefinitive and conflicting information has left much to the imagination of some food processors. Some of the largest vegetable oil processors in the United States have implied in advertisements that the cholesterol level can be lowered merely by adding polyunsaturated fatty acids to the diet. This selling campaign has created confusion among lay people, making it increasingly important that the physician clarify for his patients the conditions under which changes in the diet will be effective.

The patient should understand that if he increases his consumption of polyunsaturated fatty acids without reducing his intake of other fats, little is gained save for additional calories which could lead to obesity. A particular regimen will be effective only if polyunsaturated fatty acids are responsible for an appreciable percentage of the total fat calories. That is, they must replace rather than supplement some of the saturated fats and oils already in the diet.

* * *

Some manufacturers cite the “iodine number” of a fat or oil as evidence of the unsaturated fatty acid content of their product. This number is not a reliable indicator of therapeutic value because it measures monounsaturated and polyunsaturated fatty-acid content at the same time. A monounsaturated acid, like oleic, takes up two iodine atoms but does not affect the cholesterol concentration of the blood. A polyunsaturated acid, like linoleic, takes up four iodine atoms. In a product containing large amounts of oleic acid and small amounts of linoleic acid, the iodine number is nearly the same as it would be for a product containing little oleic acid and a modest amount of linoleic acid. Cottonseed oil has an iodine number of 110 and corn oil a number of 127; yet they each have about the same amount of linoleic acid.

* * *

Low-fat diets will not reduce the concentration of circulating cholesterol and lipoproteins as effectively as will diets containing an adequate percentage of polyunsaturated fatty acids. Weight-reduction regimens are basically low in fat, and if a lowered cholesterol level is necessary, planning must be done to maintain the proper ratio of saturated to unsaturated fats.”

* * *

Herbert Pollack, M.D.
Associate Professor of Clinical Medicine
Postgraduate Medical School
New York University, New York

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assistant professor of clinical medicine, Washington University School of Medicine, St. Louis, discuss "Practical Points in Diagnosis and Treatment of Allergic Conditions." His presentation of this subject was both practical and informative. A lively discussion followed his formal presentation.

The meeting was well attended.

The Society is indebted to Dr. Hampton for his excellent program. Chairman of the program committee for this meeting was Dr. E. F. McDonald of Jackson.

E. W. Johnson, M.D., *Secretary*

Mineral Area County Medical Society

Francis J. Burns, M.D., St. Louis, presented the scientific program at the April 21 meeting of the Mineral Area County Medical Society in the State Hospital at Farmington. His subject was, "The Management of Polyps of the Rectum and Colon."

Dr. Burns presented this subject in an interesting and informative manner and numerous questions were asked by those in attendance. This program was furnished by the Missouri Academy of General Practice.

George L. Watkins, M.D., *Secretary*

NEW MEMBERS

Robert R. Burns, M.D., 10 Richards Road, Kansas City, has become a member of Jackson County Medical Society. Dr. Burns is a native of Texas, received his preliminary education in Texas, and his M.D. degree from Southwestern Medical School in May 1959.

Albert M. Crocker, M.D., 2945 Indiana Ave., Kansas City, has become a member of the Jackson Medical Society. Dr. Crocker is a native of Louisiana, received his preliminary education in Washington, D. C., and his M.D. degree from Meharry Medical College in June, 1955.

Theodore J. Dubuque, Jr., 634 N. Grand Blvd., St. Louis, has become a member of the St. Louis Medical Society. Dr. Dubuque is a native of Missouri, received his preliminary education in St. Louis and his M.D. degree from the St. Louis University School of Medicine in 1952. He interned and served his residency both at St. Louis University Hospital.

Joseph C. Gottsch, M.D., 7305 Cheyenne Drive, Independence, has become a member of the Jackson County Medical Society. Dr. Gottsch is a native of Iowa, received his preliminary education in Iowa and his M.D. degree from the State University of Iowa in 1951.

Walter F. Haith, M.D., 2462 Brooklyn Ave., Kansas City, has become a member of the Jackson County Medical Society. Dr. Haith is a native of North Carolina, received his preliminary education in North Carolina and his M.D. degree from Meharry Medical College in 1952.

Thomas M. Holder, M.D., Mercy Hospital, Kansas City, has become a member of the Jackson County Medical Society. Dr. Holder is a native of Mississippi, received his preliminary education in Mississippi and his M.D. degree from Bowman Gray Medical School in 1952.

Robert S. Mendelsohn, M.D., 7438 Buckingham Dr., St. Louis, has become a member of the St. Louis Medical Society. Dr. Mendelsohn is a native of Ohio, received his preliminary education in Virginia and his M.D. from Washington University School of Medicine in 1954. He interned at Barnes Hospital, St. Louis.

Manson B. Pettit, M.D., 3400 Frederick Ave., St. Joseph, has become a member of the Buchanan County Medical Society. Dr. Pettit is a native of Texas, received his preliminary education in Washington and his M.D. degree from Vanderbilt University in 1928.

Orville C. Walker, Jr., M.D., 2732 S. Crysler St., Independence, has become a member of the Jackson County Medical Society. Dr. Walker is a native of Kansas, received his preliminary education in Kansas and his M.D. degree from the University of Kansas School of Medicine in 1957.

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Extreme solubility may contribute to the higher blood levels that are so notable with Chemipen.* Equally notable is the remarkable resistance to acid decomposition (Chemipen is stable at 37°C. at pH 2 to pH 3), which in turn makes possible the convenience of oral treatment.

And the economy for your patients will be of particular interest—Chemipen costs no more than comparable penicillin V preparations.

Dosage: Doses of 125 mg. (200,000 u.) or 250 mg. (400,000 u.), t.i.d., depending on the severity of the infection. The usual precautions must be carefully observed with Chemipen, as with all penicillins. Detailed information is available on request from the Professional Service Department.

Supply: Chemipen Tablets of 125 mg. (200,000 u.) and 250 mg. (400,000 u.), bottles of 24 tablets. Chemipen Syrup (cherry-mint flavored, nonalcoholic), 125 mg. per 5 cc., 60 cc. bottles.

*Knudsen, E. T., and Rolinson, G. N.: Lancet 2:1105 (Dec.19) 1959.

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FOREIGN GRADUATES MUST BE CERTIFIED

Hospitals employing graduates of foreign medical schools who fail to meet certain requirements by December 31 will face action by the American Hospital Association.

At that time, the AHA will cease listing hospitals which employ in patient-care situations foreign medical graduates who have not been certified by the Educational Council for Foreign Medical Graduates. Edwin L. Crosby, M.D., AHA director made the announcement.

Explanation of the ruling appears in a question-and-answer pamphlet now being mailed to all hospitals which are members of the AHA.

The AHA listing program provides a national census of hospitals that meet specific requirements. Listing is not intended to be a measure of quality of care, Dr. Crosby said. However, listing is a prerequisite for accreditation by the Joint Commission on Accreditation; thus if a hospital loses its listing, it automatically loses its accreditation.

The list is published annually in Part II of the August 1 Guide Issue of *Hospitals*, journal of the American Hospital Association.

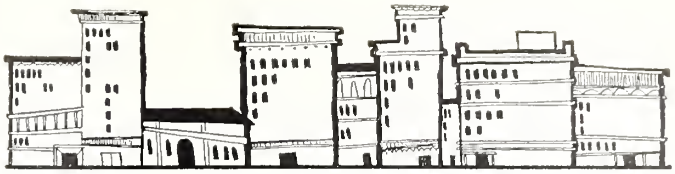
The AHA ruling follows that of the American Medical Association, which has stated that it will withdraw approval of internships and residencies in hospitals employing foreign graduates after July 1, unless the appointees meet one of the following requirements:

Possesses a full and unrestricted state license to practice; is in his final six months of training; possesses full or temporary certification from the Educational Council; or has been given a six-month appointment contingent on passing the Sept. 21, 1960, examination by the Educational Council.

The Council was organized in 1957 for evaluating the qualifications of graduates of foreign medical schools. It is sponsored by the AHA, AMA, The Association of American Medical Colleges and the Federation of State Medical Boards of the United States. The examination includes verification of educational credentials; an oral English test, and a written test of medical knowledge.

The Council was formed because of the tremendous number of graduates coming to the United States for advanced medical training and the difficulty in maintaining adequate and current information about foreign medical schools.

From the Medical Schools



UNIVERSITY OF MISSOURI

Meetings and Talks

A Grey Ladies Capping Ceremony was held in the Medical Center Auditorium on March 29. Rev. W. E. Longstreth, Chairman of the Boone County Chapter of Red Cross, presided at the meeting and Dr. Vernon E. Wilson, Dean of the School of Medicine and Director of the University Hospital, extended the welcome to the group where 18 were capped.

A meeting of the Boone County Medical Society was held in the Medical Center Auditorium on April 5.

The Central Missouri Dietetic Association held a meeting in the Medical Center Auditorium on April 12. Mrs. Margaret Bowden, Representative of the Stauffers Restaurant Association, spoke to the group on "Opportunities for Dietetic Internship with Stauffers Restaurant Association" and Mrs. Amy Anderson, instructor in nutrition and dietetics and assistant dietition at the Medical Center, spoke on "Opportunities for Dietetic Internships in Hospitals." There was also a dietetic movie "View From the Mountain" shown

The monthly meeting of the Medical History Group was held in the Medical Sciences Building on April 14, with guest speaker, Dr. L. R. C. Agnew, Chairman of the Department of History of Medicine, at the University of Kansas, who spoke on "Murder and the M.D."

Visitors

On April 2 to 4, Dr. Yngva A. A. Larsson, visiting professor from Crown Princess Lovisa's Children's Hospital in Stockholm, Sweden, visited the University of Missouri Medical Center. Dr. Larsson is internationally famous for his studies of children with diabetes and is visiting selected University Centers with research programs for children with diabetes. He spent three days with Dr. Jackson and exchanged information regarding diabetic programs.

Dr. Falls B. Hershey, Chief, Surgical Service of the Veterans Administration Hospital, St. Louis, visited the University of Missouri Medical Center on March 23 where he was guest lecturer and conducted Surgical Grand Rounds.

On April 13, Dr. Oscar P. Hampton of St. Louis visited the Medical Center where he conducted Surgical Grand Rounds and was Guest Lecturer.

Trips and Talks

Dr. Vernon E. Wilson, Dean of the School of Medicine and Director of the University Hospital, attended the Regional Meeting of the White House Conference on Aging which was held at Fulton, on March 21. Dr. Wilson was at the Manchester College, North Manchester, Indiana, on Saturday, March 26, where he gave an address "The Sciences and Medical Education" at the dedication of the College Science Hall. On March 31, Dr. Wilson was guest speaker at the luncheon of the Rotary Club at the Daniel Boone Hotel where he spoke to the group on "Your Medical School." Dr. Wilson attended, on April 12, the meetings of the Federation of American Societies for Experimental Biologies which met in Chicago April 11-14.

Dr. Gwilym S. Lodwick, Associate Dean of the School of Medicine and professor and chairman of the Department of Radiology, visited several service defense agencies to observe the professional training programs and defense plans for care of mass casualties in the event of military or civil disaster which was sponsored by Medical Education for National Defense (MEND) program, which began in San Diego, California, the week of March 17 to 24. During the week of April 4 to 9, Dr. Lodwick was in California, where he visited the University of California School of Medicine and Stanford University School of Medicine for the purpose of studying the education programs of the two institutions.

Several members of the Department of Anatomy, Dr. M. D. Overholser, professor of anatomy and chairman of the Department; Dr. E. W. Lowrance, professor; Dr. J. W. Brown, associate professor; Dr. H. E. Brown and Dr. J. C. Thaemert, assistant professors, attended the International Congress of Anatomists in New York City the week of April 11-16. Dr. J. W. Brown presented a paper entitled "The Development of the Chief Sensory Nucleus of V in the Human Fetus" and Dr. Lowrance presented a paper entitled "Postnatal Appearance of Sex Difference in the Interacetabular Diameter of the Rabbit Pelvis" at this meeting and Dr. Thaemert presented a demonstration "The Fine Structure of Nerve Endings in Smooth Muscle."

Dr. F. E. Doenges, assistant professor of anatomy, attended the Washington University Neurology-Neurosurgery Alumni Conference at St. Louis, April 8, where he participated in the discussion.

Dr. T. D. Luckey, professor and chairman of the Department of Biochemistry; Dr. John M. Franz and Dr. A. A. White, assistant professors, attended the Federation of American Societies for Experimental Biology Meeting held in Chicago, Illinois, the week of April 10 to 15 where Dr. Luckey presented a paper entitled "Cricket Nutrition; Unknown Growth Factor" at a session over which Dr. Luckey presided as chairman. On April 6 and 7, Dr. White attended a meeting of the Tissue Culture Association, held in Chicago, Illinois, where he presented a paper entitled "Studies on the Role of Alkaline Phosphatase in the Formation of Bone Developing in Tissue Culture."

Dr. Frank B. Engley, Jr., Ph.D., professor and chairman of the Department of Micobiology; Dr. chairman of the Department of Microbiology; Dr. James T. Barrett, associate professor, and Dr. Donald P. Durand, assistant professor, with several gradute students attended the Missouri Valley Branch, Society of American Bacteriologists meeting held at Lawrence, Kansas, on March 25 and 26, at which time Dr. Durand presented a paper on "Plaque Size Variation of Newcastle Disease Virus."

Dr. Engley attended a meeting on March 28 at the Central Missouri State College, at Warrensburg, where he presented a talk on "Careers in the Biological Sciences." Dr. Engley, Dr. Barrett and Dr. Durand attended the Eastern Missouri Branch of Society of American Bacteriologists meeting held at St. Louis, on March 29, where Dr. Barrett served as secretary-treasurer at the quarterly scientific meeting. Dr. Engley, Dr. Barrett and Dr. Durand attended a Syphilis Serology Conference held at the Missouri Hotel by the Division of Health, Bureau of Laboratories, in Jefferson City on March 30.

Several members of the Department of Obstetrics and Gynecology attended meetings in Cincinnati, Ohio, the week of April 1 to 4. Dr. Jacob S. Roden, professor and chairman of the Department of Obstetrics and Gynecology, and Dr. Harold M. Haugen, assistant professor, attended the American Society for the Study of Sterility meeting, and Dr. Roden and Dr. David G. Hall, assistant professor, attended the American College of Obstetricians and Gynecologists meeting.

Dr. Robert L. Jackson, professor and chairman of the Department of Pediatrics, spent two days, March 16 and 17, in the Department of Pediatrics at the University of Arkansas, Little Rock, where he was guest professor at the University of Arkansas and gave two formal lectures on "Nutritional Problems of Children" and "Care of Children With Diabetes." In addition he attended numerous conferences and ward rounds.

On April 1 and 2, Dr. Jackson attended the National Research Council Food and Nutrition Board group at Washington, D. C., where he, as Chairman of the Committee on Infant Nutrition, gave the committee report to the board and was invited to attend the board meeting.

Dr. Harold W. Lischner, instructor in pediatrics, attended the American College of Physicians meeting held in San Francisco, California, April 4 to 8.

Dr. B. A. Westfall, professor and chairman of the Department of Physiology and Pharmacology, was the University of Missouri delegate to the 1959-60 meeting of the United States Pharmacopoeial Convention in Washington, D. C., on March 28 and 29. Drs. Westfall, D. K. Meyer, W. S. Platner, professors of physiology; R. L. Russell, associate professor of pharmacology, and Mr. Jim L. Shields, graduate assistant, attended the 44th Annual Meeting of the Federation of American Societies for Experimental Biology held in Chicago, the week of April 11 to 15.

On March 14, Dr. A. W. Merrick, associate professor of physiology, visited the Department of Physiology, Baylor University, where he attended an orientation of recently developed physiologic laboratory equipment.

Dr. Hugh E. Stephenson, Jr., professor and chairman of the Department of Surgery, attended "Career Day" at Hickman High School on March 17 to acquaint the students with the possibilities for requirements involved in choosing an occupation. Dr. Stephenson spoke to the Mid-West Conclave of the Alpha Gamma Rho Fraternity on March 26.

At the American Nursing Association meeting held on March 31, at the University of Missouri Medical Center, Dr. Stephenson spoke to the American Nursing Association Group of Operating Room Nurses on "Open-Heart" surgery. Dr. Stephenson attended the American Medical

(Continued on page 756)

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Association meeting in the Drake Hotel, at Chicago, Illinois, on April 9 and 10. While at this meeting he attended the American Medical Association Ad Hoc Committee meeting on standing operating room deaths.

Dr. Stephenson was panelist for the Greek Week Faculty Panel Discussion at the Sigma Phi Epsilon House on April 12.

Dr. Kenneth K. Keown, professor of anesthesiology, attended the Missouri State Medical Association general meeting in St. Louis on March 15 where he presided.

Dr. Keown spoke at the Missouri State Nursing Association, Private Duty Section on "The Nurses Postoperative Responsibilities" in the Daniel Boone Hotel on March 31. On April 4 to 7 at the International Anesthesia Research Society annual meeting in Washington, D. C., Dr. Keown spoke on "Diagnosis and Treatment of Heart Failure in the Operating Room."

Dr. John A. Buesseler, associate professor of ophthalmology, and Dr. Carl H. Almond, assistant professor of surgery, were in Kansas City, on March 31, to visit the Kansas University Medical Center Tissue Transplant Laboratories. Dr. Buesseler spoke on "Tissue Transplantations and Preservation" to the Medical Staff of the Memorial Hospital at Jefferson City on April 11.

At the Kansas City Branch of the American Urological Association, Dr. Ian M. Thompson, professor of surgery (urology), spoke on "Surgical Correction of Urinary Incontinence" in Kansas City on March 23.

The week of April 13 to 18, Dr. Warren P. Sights, assistant professor of surgery (neurosurgery), was in San Francisco, California, attending the Harvey Cushing's Society of Neurosurgery.

Dr. Robert E. Paulette, instructor in surgery, attended the second annual meeting of University Chief Surgical Residents at the University of Colorado Medical Center. This meeting will be held at the University of Missouri Medical Center in two years.

Dr. Howard B. Strauss, assistant instructor and first year resident in the Department of Surgery (ophthalmology) attended a postgraduate course in ophthalmology at the Kansas University Medical Center in conjunction with the residency training program in ophthalmology at the University of Missouri, April 4 to 6 in Kansas City, Kansas.

New Appointments

Dr. Peter Joseph Calise has been appointed assistant professor in surgery (anesthesiology)

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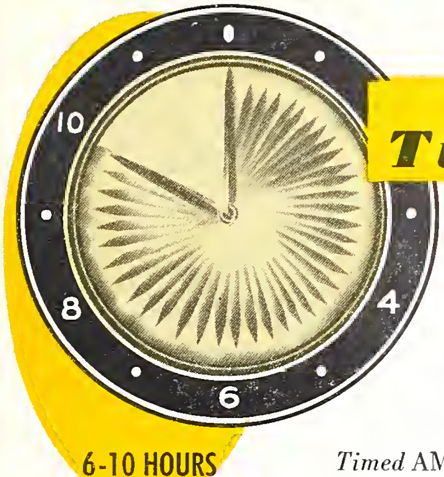

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SAMPLES AND LITERATURE UPON REQUEST

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effective August 15. He received his A.B. in 1951 from Brown University, and his M.D. in 1955 from Washington University. Dr. Calise is now a Lieutenant in the Medical Corps, U. S. Navy, at the U. S. Naval Hospital, Portsmouth, Virginia, and is to be discharged August 3, 1960.

Dr. Eugene Clyde Capps has been appointed assistant instructor in surgery (anesthesiology) effective June 1. He received his B.A. in 1955 from Vanderbilt University and his M.D. in 1959 from the University of Tennessee. At the present time, Dr. Capps is interning at Hillcrest Medical Center, Tulsa, Oklahoma.

Gilbert Ross, Jr., has been appointed assistant instructor in surgery (urology) and third year resident, effective January 15, 1960. He received his B.S. degree in 1950 and his M.D. in 1954 from the University of Michigan. At the present time, Dr. Ross is a research assistant in the Department of Surgery (U.S.P.H.S.), University of Michigan.

WASHINGTON UNIVERSITY

Cervical Cancer Study

The departments of Obstetrics and Gynecology and Radiology at Washington University School of Medicine have undertaken a joint project to study better means of treating cervical cancer. A step wedge filter has been developed and built into the port of the betatron. This will allow the delivery of supervoltage x-rays in an arrangement which will coincide exactly with the isodose pattern from the radium implants. This will supplement the radiation to the lymph node bearing area of the pelvis by a more satisfactory and safer method. The effect of this 22.5 M.e.v. x-ray irradiation is to be compared with that of interstitially injected radiogold. A comparison will be made of the histologic changes observed by the two methods in both malignant and normal tissues. The U.S.P.H.S. has announced a grant of $220,770 to the Medical School to support this project. The money is to be used to support the cost of this treatment and hospitalization both of indigent and semi-indigent patients. Dr. Alfred I. Sherman of the department of Obstetrics and Gynecology is the chief investigator and will work with Dr. William E. Powers, chief radiotherapist in the department of Radiology.

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Foreign Trips

Three members of the department of biological chemistry at Washington University School of Medicine will participate in scientific meetings in Europe this summer. Dr. Carl F. Cori, professor and head of the department, will be in Lindan, Germany, July 4 to 8 for the 10th Conference of Nobel Prize Winners; London, England, July 18 to 26 for the Tercentenary Celebration of the Royal Society, and Milan, Italy, Sept. 16 and 17, for the First International Symposium on Phosphorylated Glucides.

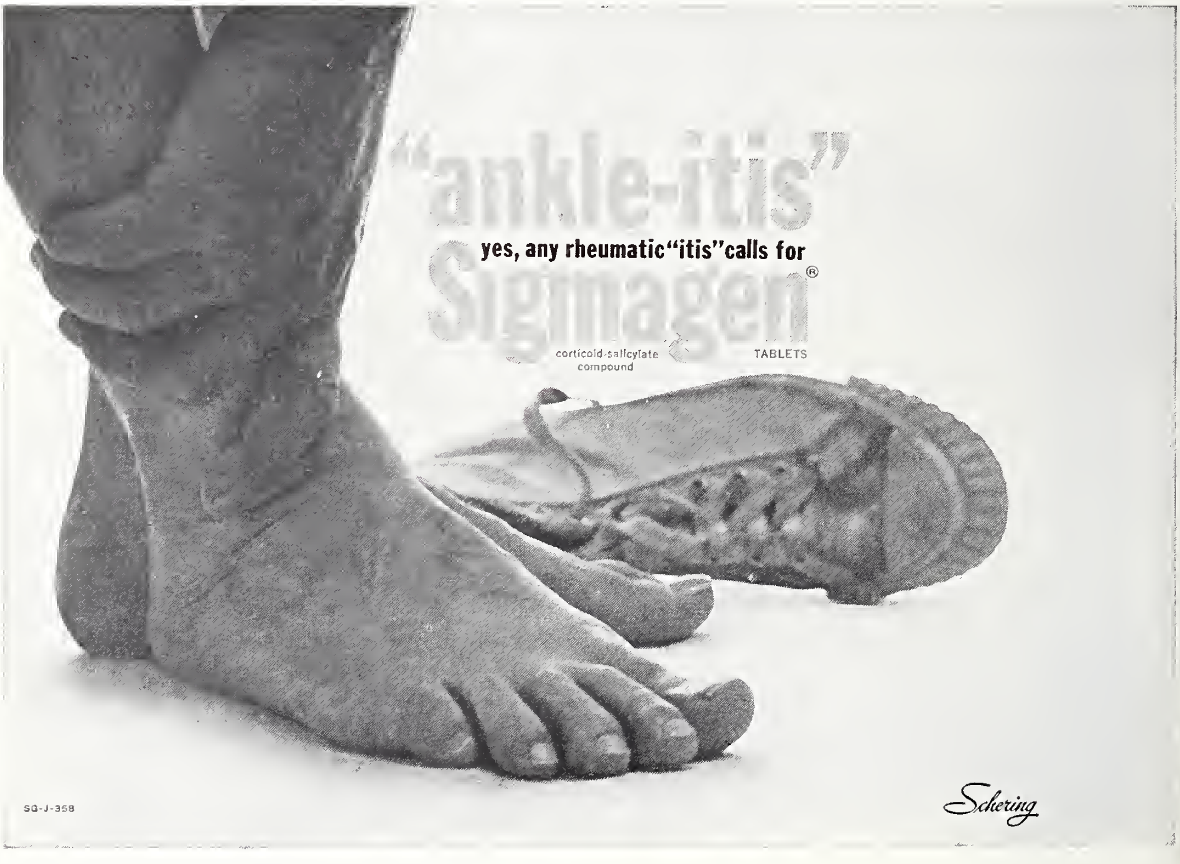
Dr. Robert K. Crane, associate professor of biological chemistry, will deliver a paper on the mechanism of intestinal absorption of sugars at the International Symposium on Problems of Membrane Transport, Aug. 21-28 in Prague, Czechoslovakia.

Dr. Luis Glaser, assistant professor and Helen Hay Whitney Foundation Post-Doctoral Fellow in Biological Chemistry, will discuss the synthesis of polysaccharides from nucleotide linked sugars at the International Symposium on Carbohydrate Biochemistry July 18 to 21 in Paris, France.

Recent scientific investigations conducted in the Department of Pharmacology will be reported at European meetings by Dr. F. Edmund Hunter, Jr., associate professor of pharmacology; Dr. Gerard M. Lehrer, post-doctoral fellow in pharmacology, and Dr. Jack L. Strominger, associate professor of pharmacology. Dr. Hunter will participate in a symposium on "Macromolecular Structure and Biological Function" Sept. 12 in Stockholm, Sweden. Dr. Lehrer will present a research paper at the International Congress of Histochemistry Aug. 28 in Paris and Dr. Strominger will discuss research at a symposium on "Biochemistry of Glycosides" July 17 in Paris.

Dr. W. Stanley Hartroft, professor and head of the department of pathology, will be a visiting professor at the Institute of Biology and Experimental Medicine in Buenos Aires, Argentina, during September and October. The trip was instigated at the invitation of Dr. Bernardo A. Houssay, Nobel Prize Laureate, who is internationally known for his work concerning internal secretions, hypertension, diabetes and snake and spider venom.

Dr. William H. Daughaday, associate professor of medicine, will present research papers at two international meetings this summer. He will participate in the First International Congress of Endocrinology in Copenhagen, Denmark, July 18 to 23, and the Sixth International Con-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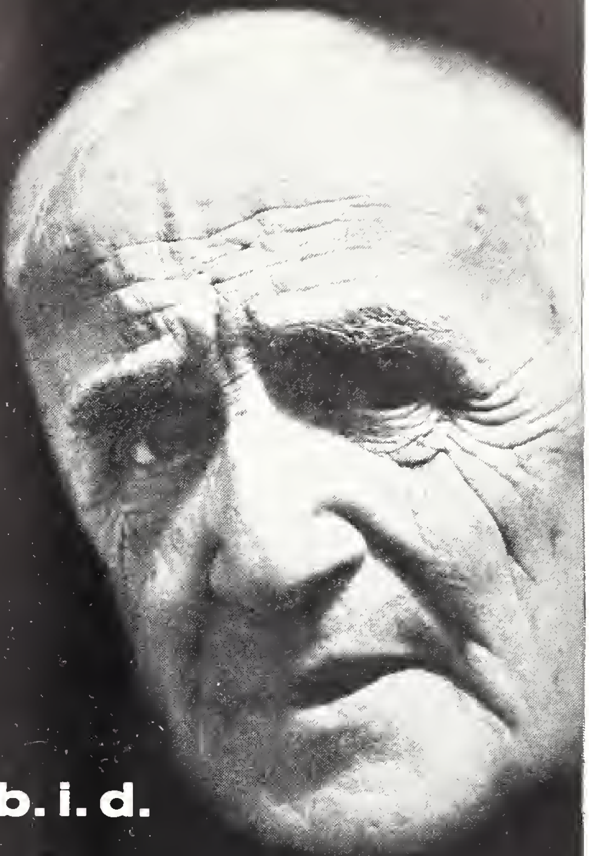

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gress of Internal Medicine, Aug. 24 to 27 in Basle, Switzerland.

Dr. Hugh Chaplin, Jr., assistant professor of medicine and of preventive medicine, will be one of the principal speakers at the Eighth International Congress on Blood Transfusion to be held in August in Tokyo. In early September, he will present a paper on a new method for preparing human bone marrow for transfusion at a symposium on "Bone Marrow Transplantation" and he will be a speaker at the meeting of the International Society of Hematology. Both meetings will be in Tokyo. Also participating in the International Congress of Hematology in Tokyo will be Dr. William J. Harrington, associate professor of medicine, who will discuss recent Washington University investigations regarding blood platelets and leukemia.

Dr. Neal S. Bricker, assistant professor of medicine and of preventive medicine, has been granted a year's leave of absence to conduct research at the Institute of Biological Chemistry at the University of Copenhagen, Denmark. He will also attend the First Annual Congress of Nephrology to be held Sept. 1 to 3 in Geneva, Switzerland.

Four members of the Washington University School of Medicine staff participated in the Section on Geriatrics and Gerontology of the 35th Anniversary Congress of the Pan American Medical Association in May in Mexico City. Dr. William B. Kountz, assistant professor of clinical medicine, discussed changes in human tissue produced by hormone variation; Dr. Teofil Kheim, research assistant in gerontology, hereditary characteristics of hypercholesterolemia. Dr. Philip G. Ackermann, research assistant professor in gerontology, described protein requirements in elderly individuals and serum lipoprotein in older individuals was discussed by Gelson Toro, research assistant in gerontology.

Lectures

A course on radiation and radioactive tracers technology in life sciences was conducted at Washington University School of Medicine in April. Sessions were sponsored by the Radiation Hazards Control Committee and the Medical Education for National Defense Group at the Medical School and were for the primary benefit of scientific investigators using radioactive isotopes in the fields of biology and medicine. The isotope course faculty included Michel Ter-Pogossian, associate professor of radiophysics; Edward Condon, professor and chairman of the physics department; Jonathan Townsend, Alec

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Sunday, June 26, 1960
The Holiday Inn

***ROANOKE, VIRGINIA**
Saturday, July 16, 1960
The Hotel Roanoke

***SANTA ROSA, CALIFORNIA**
Friday, September 16, 1960
The Flamingo Hotel

***KANSAS CITY, KANSAS**
Friday, September 23, 1960
Battenfeld Memorial
Auditorium

HOUSTON, TEXAS
Saturday, September 24, 1960
The Shamrock Hilton Hotel

DEFIANCE, OHIO
Wed., September 28, 1960
Defiance College

PHILADELPHIA, PENN.
Sunday, October 16, 1960
The Sheraton Hotel

***HARTFORD, CONNECTICUT**
Thursday, October 20, 1960
The Statler Hotel

***GREAT FALLS, MONTANA**
Saturday, October 22, 1960
The Rainbow Hotel

ROCHESTER, NEW YORK
Wednesday, October 26, 1960
The Manger Hotel

CHARLESTON, WEST VIRGINIA
Sunday, October 30, 1960
The Daniel Boone Hotel

SIOUX FALLS, SOUTH DAKOTA
Tuesday, November 1, 1960
The Sheraton-Cataract Hotel

***CHARLOTTE, N. CAROLINA**
Thursday, November 3, 1960
The Hotel Charlotte

***CLEVELAND, OHIO**
Wednesday, November 9, 1960
Pick Carter Hotel

***SOUTH BEND, INDIANA**
Friday, November 18, 1960
The Pick-Oliver Hotel

WESTCHESTER COUNTY, N. Y.
Wednesday November 30, 1960
Westchester Country Club

ST. PETERSBURG, FLORIDA
Saturday, December 3, 1960
Tides Hotel and Bath Club

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Pond and Franklin Schull, associate professors of physics, all of the Washington University; Edward Rapkin, Packard Instrument Company; Leo Dubinsky, director, Inspection Division, U. S. Atomic Energy Commission, and Robert Storey, Abbott Laboratories. Films shown each day were provided by the Atomic Energy Commission and covered such subjects as nuclear reactions, new developments in the nuclear field and safe control of isotopes.

Dr. Severo Ochoa, New York University biochemist and 1959 Nobel Prize Laureate, delivered the third annual Philip A. Shaffer Lecture in May. He discussed the enzyme system for RNA synthesis he developed and for which he was awarded the Nobel Prize in medicine and physiology. He shared the 1959 Nobel honors with Dr. Arthur Kornberg of Stanford University, former professor and head of the department of microbiology at Washington University. Also a former Washington University staff member, Dr. Ochoa was instructor and research associate in pharmacology at the Medical School from 1941 to 1942, when he joined the New York University staff as research associate in medicine. He is now professor and head of the department of biochemistry there. This year's lecture honored Dr. Shaffer on his fiftieth year of service to Washington University School of Medicine. He joined the staff in 1910 as professor of biochemistry; served as dean of the Medical School from 1915-1919 and from 1937-1946 and was appointed to his present position as distinguished service professor emeritus and lecturer in biological chemistry in 1951. At 79, he is still conducting research in the field of biochemistry.

Dr. Rita Levi-Montalcini, professor of zoology at Washington University delivered the eighth annual Alpha Omega Alpha lecture in April. She discussed biological aspects of the anti-serum which she and Dr. Stanley Cohen recently developed as an aid in regulating the activity of the central nervous system. Dr. Cohen, a former Washington University staff member, is now at Vanderbilt University. Alpha Omega Alpha recognizes outstanding scholarship and leadership in medicine and related fields. The Washington University chapter, Alpha of Missouri, is the seventh oldest of the society, dating from 1905.

Another April lecturer was Dr. Leroy Fothergill, Scientific Adviser to the U. S. Army Biological Warfare Laboratories, Ft. Detrick, Md., who spoke on "Biological Warfare and Its De-

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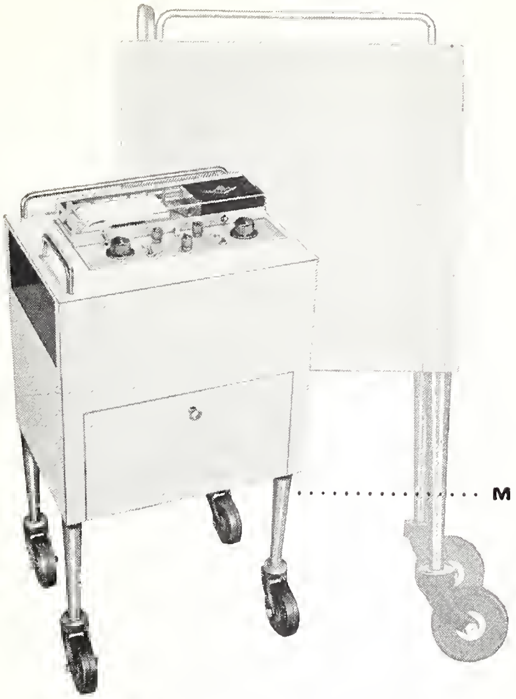

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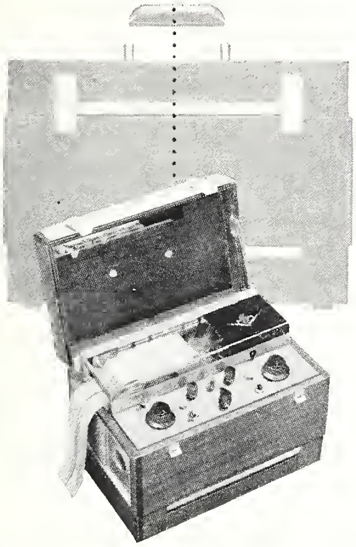

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fense." The lecture was sponsored by the Medical Education for National Defense Group. Dr. Fothergill, who received the medical degree from Harvard and was later a member of the departments of bacteriology and immunology there, has been associated with the Biological Warfare Laboratories at Ft. Detrick since 1946. He is the author of several scientific research papers concerning meningitis; infectious encephalitides, and intestinal infections.

ST. LOUIS UNIVERSITY

Grants

Dr. Armand E. Brodeur, assistant professor of radiology, and Dr. William F. Melick, associate professor of clinical urology and director of the department at the St. Louis University School of Medicine, have been awarded a $66,576 grant by the United States Public Health Service to study the urinary tract in infants and children.

The study will be conducted in the x-ray department at the Cardinal Glennon Memorial Hospital for Children where Dr. Brodeur is radiologist-in-chief and Dr. Melick is urologist-in-chief.

In their project, Drs. Melick and Brodeur will take x-ray motion pictures simultaneously with pressure tracings of the kidney and the structures to the urinary bladder. Movies of both normal and abnormal conditions will be made with the idea of compiling more information as to the nature of these anomalies and the probable implications as to subsequent kidney diseases.

They plan to coordinate their study with the development of high blood pressure, a condition which often is associated with kidney ailments.

They will compile a library of motion picture x-rays depicting the various common and rare abnormalities in children. Special x-ray motion equipment to be used in the study will be purchased under the grant.

Dr. John T. Matschiner, senior instructor in biochemistry, has been awarded a grant under the Medical Faculty Awards Program of Lederle Laboratories Division, American Cyanamide Company, to be used for salary and travel expenses over a three year period.

Dr. Matschiner was one of 14 young medical school faculty members named this year to share $250,000 under the Medical Faculty Awards Program. The awards are made annually to help

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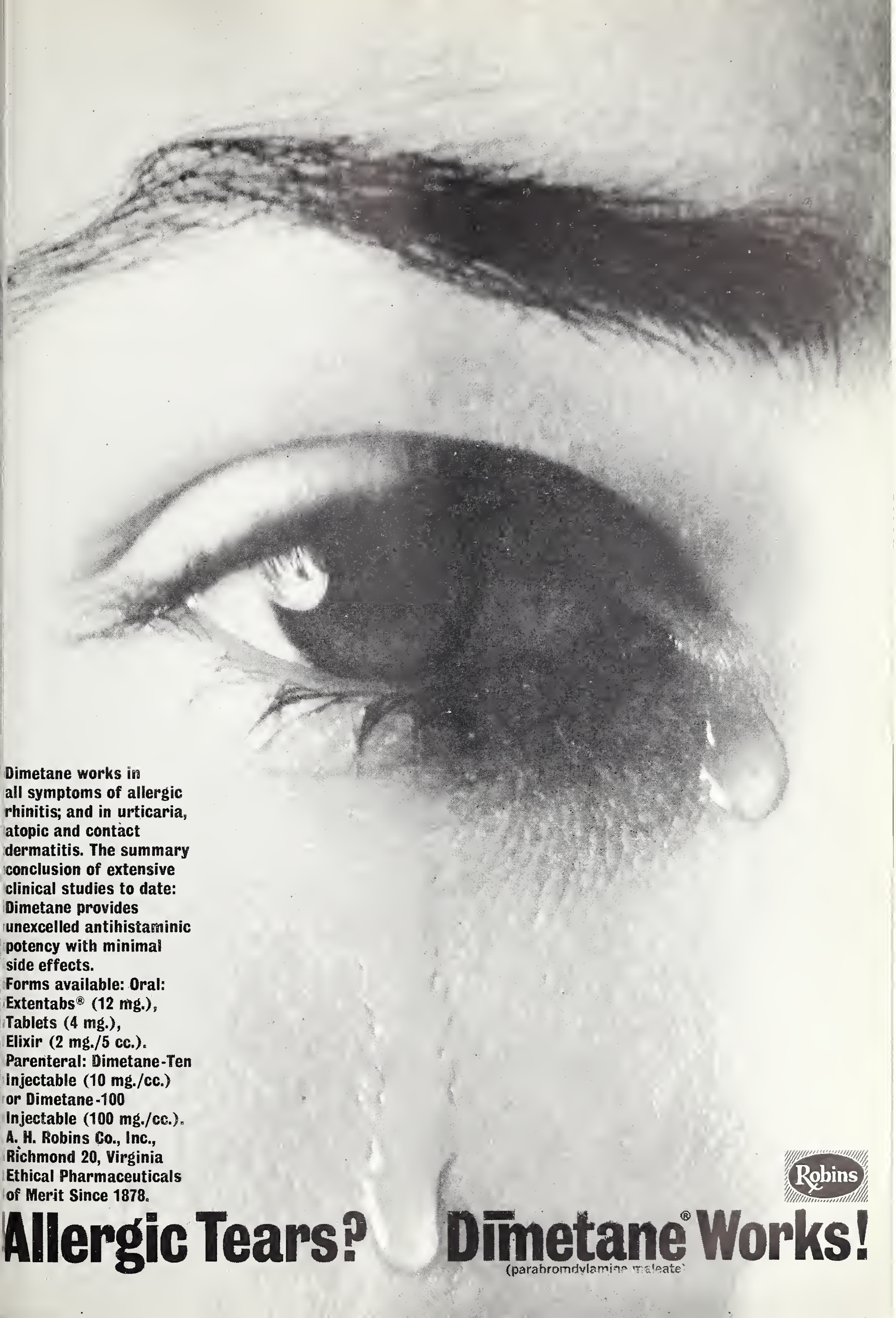

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Dr. Matschiner's studies at the University have included the biochemistry of bile acids and the effect of vitamin K and vitamin A upon experimental animals.

The Lederle awards are administered by an independent Awards Committee which has full authority in the selection of recipients. Nominations were made to the awards committee by the deans of the medical schools.

Lectures

Dr. George L. Curran, associate professor of internal medicine, delivered the twelfth Alphonse M. Schwitalla Lecture on April 21. The lecture, sponsored by the Alpha Omega Alpha Honorary Medical Society, is held each year in conjunction with initiation into the society.

Dr. Curran spoke on "Facts, Fictions and Speculations About the Aging Process." Fifteen students were received into the society at a banquet following the lecture. Seniors elected to membership were: Donald R. Adams, Joseph L. Allain, Jr., Roger A. Ewald, Duane Q. Hagen, Mrs. Joan G. Kruεger, Hilary F. Linder, Robert R. Maginn, George W. Parker, Alan J. Peterson, Richard A. Plessala. Juniors elected were: Richard Christie, Scott C. Guth, John J. Herbst, Carroll E. Howard and Kenneth D. Rashid. Each year a select number of the senior and junior class is approved for candidacy by the officers of the school and elections are made by the active members of the chapter. Membership is based on scholarship, character and personality. The objectives of Alpha Omega Alpha are the promotion of scholarship and research in medical schools, the encouragement of a high standard of character and conduct.

Three medical faculty representatives participated in a panel discussion on blood dyscrasias at St. Anthony's Hospital in Effingham, Ill., the latter part of April. Participants were: Dr. Goronwy O. Broun, instructor in internal medicine; Dr. John McCarthy, instructor in internal medicine, Dr. George Gantner, senior instructor in pathology. The panel discussion was sponsored by the Southeastern Illinois Division of the Leukemia Guild.

Dr. Joseph A. Hardy, director, department of gynecology and obstetrics, was a guest speaker before the Texas Medical Association's 1960 Annual Session held in Fort Worth, April 9 to 12. Dr. Hardy spoke on "Advances in Gynecology and Obstetrics."

Desloge Hospital

Firmin Desloge Hospital, the main teaching hospital of the School of Medicine, gave free patient care amounting to $902,908.88 during 1959 as compared with $710,113.95 during 1958, it was announced by the Very Rev. Paul C. Reinert, S.J., President of the University. The figures included $218,000 given by the United Fund.

Father Reinert announced that free in-patient care amounted to $578,308.88, while free outpatient care was $324,600.

Clinic visits totaled 66,107 representing a 5.1 per cent increase over 1958 visits. Psychiatric patient visits increased by almost 46 per cent. Other noted gains were in the admission of patients to cardiovascular, hypertension, allergy, hematology and arthritic clinics, which were among twenty clinics showing increased patient loads.

Last year 4,025 patients were admitted to the hospital as free or part-paid patients as compared with 3,604 during 1958. Increases were also noted in newborn infants with about 1,475 births recorded in 1959 as compared with 1,365 births in 1958.

Developments with the hospital last year included the expansion of the School of Medicine's gastroenterology laboratories, which are a function of the Internal Medicine Department. Reconstruction of the research laboratories allows for more active and extensive investigation of liver, intestinal and pancreatic diseases.

A new sub-section of the School of Medicine's Department of Ophthalmology was developed which will double diagnostic facilities and increase resident and graduate student personnel. The new laboratories, designed for a more comprehensive diagnosis of eye ailments, have been developed to include electronography, ophthalmic histopathology, bacteriology and photography.

In the Cardiac Catheterization Laboratory located at the hospital, 259 cardiac catheterizations and 198 cineangiography examinations were performed during 1959. A substantial percentage of the patients examined had heart defects, which were corrected by open heart surgery.

Other hospital improvements included the renovation and complete redecoration of Firmin Desloge Hospital cafeteria, a project supported by the Desloge Hospital Guild, which raised $20,000 to cover over-all costs.

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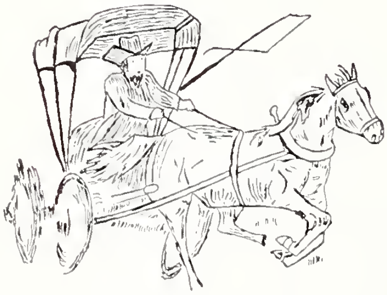

FORTY YEARS AGO

The New Orleans session of the American Medical Association attracted a much larger number of fellows and visitors than had been anticipated owing to the general impression that the hotel accommodations would be inadequate for the occasion. The registration was 3,681, and apparently everyone was well taken care of. There are at present a total of 83,338 physicians who are members of the constituent state associations, this number representing the total strength of the national organization. Of these, 45,266 have enrolled as Fellows, Missouri having a total of 3,402 members of the organization with 1,529 Fellows; out of that number 124 registered at the New Orleans session.

Under the presidency of Dr. George E. Brewer of New York the American Surgical Association met in St. Louis, May 3, 4 and 5, for the first time in sixteen years. The attendance was gratifyingly large, ninety-five members being present. Several new Fellows were elected, among them Dr. M. B. Clopton and Dr. Evarts A. Graham of St. Louis. Dr. John D. Roberts of Philadelphia was elected president and Dr. H. G. Mudd of St. Louis was elected one of the vice presidents.

Dr. M. B. Harutun of Joplin was elected commissioner of health for Joplin and has appointed Dr. J. A. Chenoweth city physician.

(Continued on page 774)

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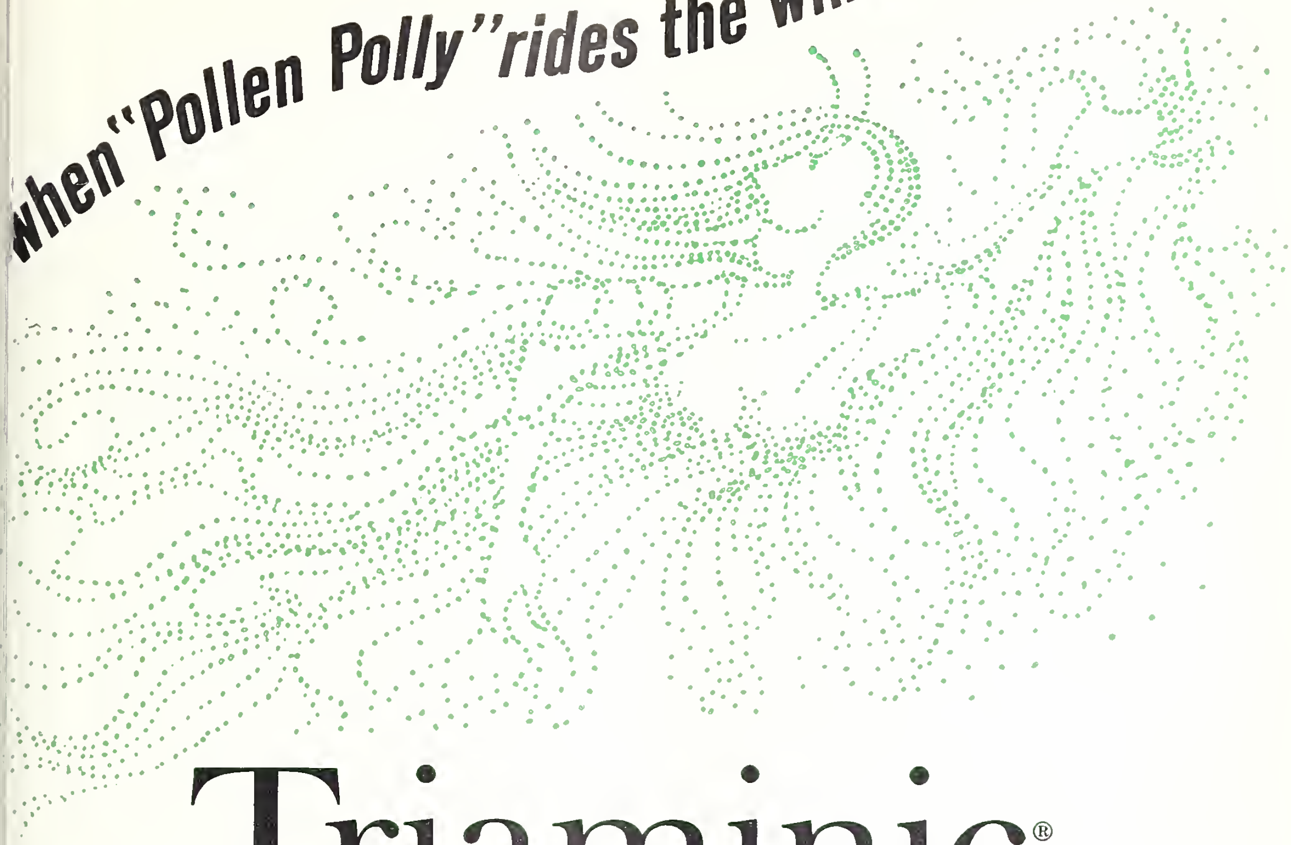

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References: 1. Fabricant, N. D.: E. E. N. T. Monthly 37:460 (July) 1958. 2. Lhotka, F. M.: Illinois M. J. 112:259 (Dec.) 1957. 3. Farmer, D. F.: Clin. Med. 5:1183 (Sept.) 1958. 4. Fuchs, M.; Bodi, T.; Mallen, S. R; Hernando, L., and Moyer, J. H.: Antibiotic Med. & Clin. Ther. 7:37 (Jan.) 1960. 5. Halpern, S. R., and Rabinowitz, H.: Ann. Allergy 18:36 (Jan.) 1960.

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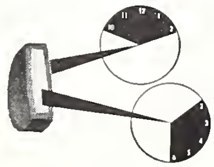

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A letter from I. C. Canada, druggist, at Nelson, Mo., tells of the need of a physician in that town, owing to the death of one of the former physicians.

Dr. Frank N. Wilson of St. Louis has been appointed one of the American editors of *Heart*, the classical English quarterly devoted to the study of the circulation, edited by Dr. Thomas Lewis of London. Other collaborators of the journal in Missouri are Drs. George Dock and Joseph Erlanger.

Dr. E. M. Fessenden, first house surgeon of the Frisco Hospital at Springfield, has been appointed surgeon in charge of the hospital to succeed Dr. Harry M. Moore, and Dr. R. W. Hogeboom has been appointed consulting surgeon for the hospital. Dr. Moore has been appointed surgeon in charge of the Frisco Hospital at St. Louis.

Dr. R. E. Hogan of West Plains has completed and opened for the convenience of the people in the southwest section of the state, a splendidly equipped hospital which he has named the Christa Hogan Hospital, in memory of his mother.

TWENTY-FIVE YEARS AGO

Missouri, and especially St. Louis, will be honored this fall when the Southern Medical Association and the Sixty-sixth Annual Session meeting, November 19 to 22, 1935. The session will be held in the new Municipal Auditorium in St. Louis, the first medical convention to be held in the building. The St. Louis Medical Society will serve as hosts at the session. The Southern Medical Association was organized in 1906 with a small but enthusiastic membership.

The American Medical Association and the Canadian Medical Association for the first time will hold a joint session when the two organizations convene for their annual sessions at Atlantic City, June 10 to 14. This is the Eighty-sixth Annual Session of the American Medical Association and the Sixth-sixth Annual Session of the Canadian Medical Association. Members of both organizations will take part in one program and no division will be made of the two associations except for business sessions.

Dr. David P. Barr, St. Louis, was elected vice president of the American College of Physicians at the annual session held in Philadelphia, April 29 to May 3.

The American Neisserian Medical Society will hold its first annual meeting on June 11 at the Claridge Hotel, Atlantic City.

The St. Louis Society for the Blind in cooperation with the National Society for the Prevention of Blindness presented the Leslie Dana Medal, awarded each year for outstanding work in blindness prevention, to Dr. Wm. Hamlin Wilder, Chicago, at a dinner meeting in St. Louis, May 18.

Dr. George H. Thiele, Kansas City, will deliver an address at the thirty-sixth annual meeting of the American Proctologic Society which convenes in Atlantic City, June 10 and 11.

On March 26 the Jackson County Medical Society devoted its meeting to a tribute to the memory of Dr. Jabez N. Jackson. The address was delivered by Dr. Charles C. Dennie and a liberal abstract of an obituary by Dr. M. A. Hanna followed it.

TEN YEARS AGO

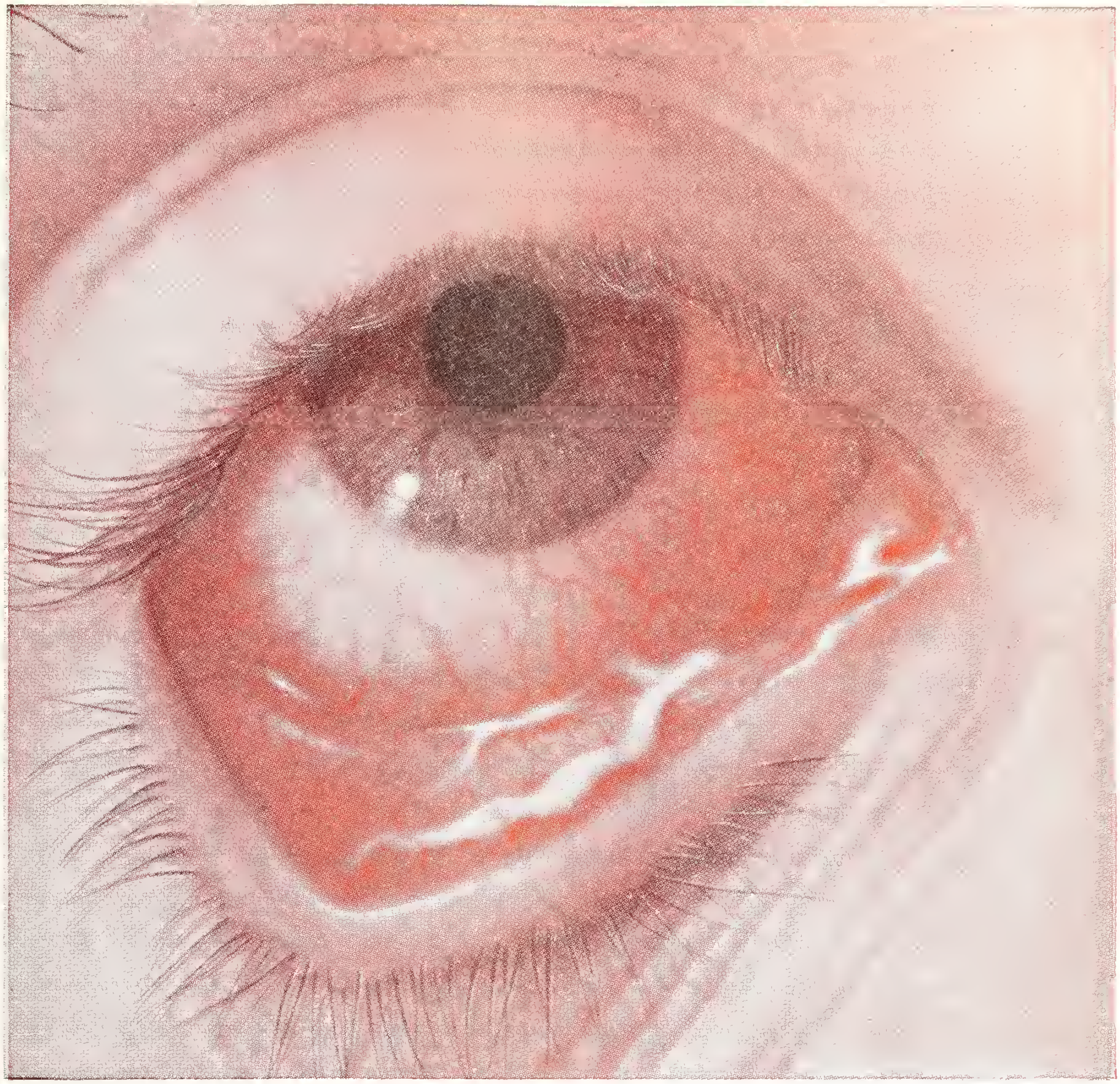
Among the 24 largest cities in the United States, New York City (including Brooklyn) is first in physician population with 17,915 physicians, an increase of 1,244 since 1942. Chicago is second with 7,477, a gain of 294; Philadelphia is third with 4,894, an increase of 649; Los Angeles is fourth with 4,183, a gain of 811, and Boston is fifth with 3,388, a gain of 454.

Charles A. Brasher, M.D., Mount Vernon, was elected president of the Missouri Chapter of the American College of Chest Physicians at a meeting held in St. Louis during the Annual Session of the Missouri State Medical Association.

Milton N. Casebolt, M.D., Kansas City, was elected president-elect of the Missouri Academy of General Practice held in Springfield April 27. Robert C. McElvain, M.D., St. Louis, was installed as president.

F. Garrett Pipkin, M.D., Kansas City, was elected president of the Association of Bone and Joint Surgeons at a meeting in Lincoln, Nebraska, April 14 and 15.

A. M. Estes, M.D., Cape Girardeau, was elected president of the Missouri Heart Association at its annual meeting in Jefferson City on May 3. The court test to determine whether or not osteopaths have the right to practice in tax supported institutions began in Mexico on May 10. Judge Sam C. Blair, Jefferson City, is presiding in the case. As previously reported, the board has excluded osteopathic practitioners from practicing in the hospital since 1940. Because the osteopaths and their patients have claimed the board was discriminatory in this action, the board filed suit in the Audrain County Circuit Court asking for a declaratory judgment which would clarify the situation for the board. Major points in the case hinge on interpretation of two state laws, one defining and licensing osteopathy, the other the county hospital law barring discrimination against any "school of medicine."



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1. Lippmann, O.: Arch. Ophth. **57**:339, March 1957
2. Gordon, D.M.: Am. J. Ophth. **46**:740, November 1958.

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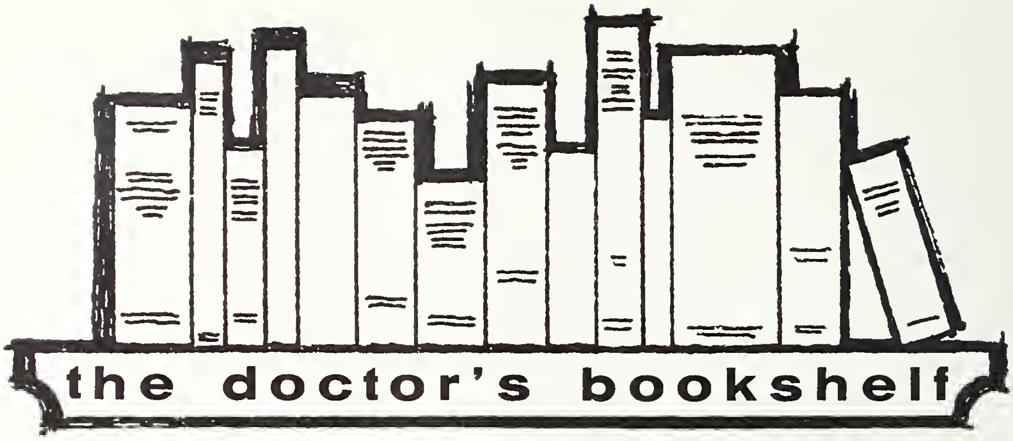

the doctor's bookshelf

BOOKS RECEIVED

Clinical Scalar Electrocardiography, by Bernard S. Lipman, M.D., Associate in Medicine, Emory University School of Medicine; Consultant, Glenville Giddings Cardiac Clinic, St. Joseph Infirmary; Consultant, Cardiac Clinic, Grady Memorial Hospital; Regional Consultant in Cardiology to the Veterans Administration, Atlanta, Ga.; and Edward Massie, M.D., Associate Professor of Clinical Medicine, Washington University School of Medicine; Director of Heart Stations, Barnes Hospital and Jewish Hospital, St. Louis; Director, Cardiovascular Clinic, Washington University Clinics; Area Consultant in Cardiology to the Veterans' Administration. Fourth Edition. The Year Book Publishers, Inc., Chicago, 1959. Price $8.00.

A Cookbook for Diabetics, Recipes From the ADA Forecast, by Deaconess Maude Behrman. Edited by Leonard Louis Levinson. Published by the American Diabetes Association, New York, 1959. Price $1.00.

The Modern Family Health Guide, Edited by Morris Fishbein, formerly Editor, *Journal of the American Medical Association,* Editor, Excerpta Medica Medical Editor, Britannica Book of the Year. Doubleday & Company, Inc., Garden City, New York, 1959. Price $7.50.

Surgery of the Foot, by Henri L. DuVries, M.D., Clinical Instructor in Surgery, Chicago Medical School; Attending Surgeon, Columbus Hospital, Mother Cabrini Hospital, and Frank Cuneo Hospital; Chairman, Department of Surgery, Illinois College of Chiropody and Foot Surgery, Chicago. Foreword by Karl A. Meyer, M.D. Introduction by Edward L. Compere, M.D. The C. V. Mosby Company, St. Louis, 1959. Price $12.50.

Regulation of Cell Metabolism. Editors for the Ciba Foundation, G. E. W. Wolstenholme, M.A., and Cecilia M. O'Connor, B.Sc. Little, Brown and Company, Boston. Price $9.50.

Carcinogenesis Mechanisms of Action. Editors for the Ciba Foundation, G. E. W. Wolstenholme, M.A., and Maeve O'Connor, B.A. Little, Brown and Company, Boston. Price $9.50.

Therapeutic Nutrition With Tube Feeding, by Morton D. Pareira, M.D., Director of Surgery, The Jewish Hospital of St. Louis; Associate Professor of Surgery, Washington University School of Medicine, St. Louis, Mo. Charles C Thomas, Publisher, Springfield, Illinois, 1959. Price $3.75.

Atlas of Roentgenographic Measurement, by Lee B. Lusted, M.D., Associate Professor of Radiology, University of Rochester School of Medicine and Dentistry; and Theodore E. Keats, M.D., Professor of Radiology, University of Missouri School of Medicine. The Year Book Publishers, Inc., Chicago, Illinois, 1959. Price $9.00.

The Ciba Collection of Medical Illustrations, Volume 3, A Compilation of Paintings on the Normal and Pathologic Anatomy of the Digestive System, Part 1, Upper

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Digestive Tract, prepared by Frank H. Netter, M.D., edited by Ernst Oppenheimer, M.D. Ciba Foundation, 1959. Price $12.50.

Synopsis of Gynecology, Fifth Edition, by Robert James Crossen, M.D., Associate Professor of Clinical Gynecology and Obstetrics, Washington University School of Medicine, St. Louis, Mo.; and Daniel Winston Beacham, M.D., Assistant Professor of Clinical Obstetrics and Gynecology, Tulane University School of Medicine, New Orleans, La.; Senior Visiting Surgeon, Charity Hospital of Louisiana at New Orleans; Obstetrician and Gynecologist, Southern Baptist Hospital and Hotel Dieu Hospital, New Orleans, La.; and Davis Beacham, M.D., Professor of Clinical Obstetrics and Gynecology, Tulane University School of Medicine, New Orleans, La.; Senior Visiting Surgeon, Charity Hospital of Louisiana at New Orleans; Obstetrician and Gynecologist, Southern Baptist Hospital and Hotel Dieu Hospital, New Orleans, La. The C. V. Mosby Company, St. Louis, 1959. Price $6.50.

Pain and Itch Nervous Mechanisms, in honour of Prof. med. Dr. Y. Zotterman, M.D. Editors for the Ciba Foundation, G. E. W. Wolstenholme, M.A., and Maeve O'Connor, B.A. Little, Brown and Company, Boston.

Steric Course of Microbiological Reactions, in honour of Prof. Dr. V. Prelog. Editors for the Ciba Foundation, G. E. W. Wolstenholme, M.A., and Cecilia M. O'Connor, B.Sc. Little, Brown and Company, Boston.

Symposium on Special Diagnostic Aids, edited by C. Paul Hodgkinson, M.D.; and Symposium on Abnormal Uterine Bleeding, edited by John I. Brewer, M.D. Paul B. Hoeber, Inc., New York.

Callander's Surgical Anatomy, by Barry J. Anson, M.A., Ph.D., Chairman, Department of Anatomy; and Robert Laughlin, Rea Professor, Northwestern University Medical School; Walter G. Maddock, M.D., Edward S. Elcock Professor of Surgery, Northwestern University Medical School, and Chairman of the Department of Surgery, Chicago Wesley Memorial Hospital. Fourth Edition, with 1047 illustrations. W. B. Saunders Company, Philadelphia and London, 1958. Price $21.00.

Maternity, A Guide to Prospective Motherhood, by Frederick W. Goodrich, Jr., M.D. Prentice-Hall, Inc., Englewood Cliffs, N. J., 1959. Price $1.75.

What Next, Doctor Peck?, by Joseph H. Peck, M.D. Prentice-Hall, Inc., Englewood Cliffs, N. J., 1959. Price $3.50.

Master Your Tensions and Enjoy Living Again, by George Stevenson, M.D., and Harry Milt. Prentice-Hall, Inc., Englewood Cliffs, N. J., 1959. Price $4.95.

Synopsis of Ear, Nose, and Throat Diseases, by Robert E. Ryan, M.D., M.S. (ALR); William C. Thornell, M.D., M.S. (ALR); and Han von Leden, M.D. The C. V. Mosby Company, St. Louis, 1959. Price $6.75.

Anesthesia for Infants and Children, by Robert M. Smith, M.D., Anesthesiologist, The Children's Medical Center, Boston, Mass.; Assistant Clinical Professor of Anesthesia, Harvard Medical School, Consultant in Anesthesia, U. S. Naval Hospital, Chelsea, Mass., and Lemuel Shattuck Hospital, Jamaica Plain, Mass. Foreword by Robert E. Gross, M.D. The C. V. Mosby Company, St. Louis, 1959. Price $12.00.

Instructional Course Lectures, Volume XVI, The American Academy of Orthopaedic Surgeons, Editor, Fred C. Reynolds, M.D. The C. V. Mosby Company, St. Louis, 1959. Price $16.00.

Symposium on Glaucoma, Editor, William B. Clark, M.D., F.A.C.S., Diplomate, American Board of Ophthalmology; Professor of Clinical Ophthalmology; Tulane University School of Medicine, New Orleans, La.; Chairman, Advisory Council on Ophthalmology, American College of Surgeons. Associate Editor, Joe M. Carmichael, M.S.J. The C. V. Mosby Company, St. Louis, 1959. Price $13.50.

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Volume 57, Number 7—July, 1960

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Minutes of the House of Delegates

One Hundred Second Annual Session

March 13, 14, 15, 16, 1960

St. Louis

Sunday Session

The first meeting of the House of Delegates of the One Hundred Second Annual Session of the Missouri State Medical Association was called to order at 1:30 p.m., March 13, in the Crystal Room, Sheraton-Jefferson Hotel, St. Louis, with Oscar P. Hampton, M.D., University City, Speaker, presiding.

Officers, Councilors and Delegates present during the Annual Session follow:

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St. Louis City	H. C. Allen, St. Louis
St. Louis City	R. B. Bassett, St. Louis
St. Louis City	E. M. Cannon, St. Louis
St. Louis City	P. G. Danis, St. Louis
St. Louis City	C. R. Doyle, St. Louis
St. Louis City	M. M. Karl, St. Louis
St. Louis City	J. C. Peden, Sr., St. Louis
St. Louis City	V. E. Scherman, St. Louis
St. Louis City	D. L. Sexton, St. Louis
St. Louis City	J. I. Simon, St. Louis
St. Louis City	J. W. Thompson, St. Louis
St. Louis City	W. T. Gunn, St. Louis
St. Louis City	D. N. Kerr, St. Louis

Fourth District

Franklin-Gasconade-Warren	F. G. Mays, Washington
Franklin-Gasconade-Warren	George Workman, Hermann
Franklin-Gasconade-Warren	H. H. Schmidt, Marthasville
Jefferson	Frank L. Kozal, Crystal City
Lincoln-St. Charles	
Lincoln-St. Charles	P. H. Rother, St. Charles
St. Louis County	O. P. Hampton, St. Louis
St. Louis County	William H. Bailey, St. Louis
St. Louis County	Robert C. Kingsland, Clayton
St. Louis County	Richard Sutter, St. Louis
St. Louis County	M. A. Diehr, St. Louis
St. Louis County	E. B. Drescher, St. Louis
St. Louis County	Louis F. Howe, St. Louis
St. Louis County	Joseph B. Kendis, St. Louis
St. Louis County	James R. Meador, Clayton

Fifth District

Audrain	Ben N. Jolly, Mexico
Boone	M. Pinson Neal, Columbia
Boone	James C. Cope, Columbia
Callaway	J. K. Ritterbusch, Fulton
Camden	
Cole	G. D. Shull, Jefferson City
Cooper	G. W. Winn, Boonville
Howard	W. J. Shaw, Sr., Fayette
Miller	
Moniteau	E. A. Kibbe, California
Montgomery	
Morgan	J. L. Washburn, Versailles

Sixth District

Benton	
Henry	Richard H. King, Clinton
Johnson	Charles M. Lederer, Warrensburg
Lafayette-Ray	W. E. Martin, Odessa
Pettis	K. B. Gonser, Sedalia
Saline	C. A. McBurney, Slater
West Central	
Bates	A. L. Hansen, Butler
Cass	D. S. Long, Harrisonville
Cedar	Robert Magee, Eldorado Springs
St. Clair	
Vernon	R. W. Pearse, Nevada

Seventh District

Jackson	J. F. Bowser, Kansas City
Jackson	P. L. Byers, Kansas City
Jackson	W. H. Hickerson, Kansas City
Jackson	W. W. Gist, Kansas City
Jackson	Gerald Hughes, Kansas City
Jackson	J. A. Growdon, Kansas City
Jackson	J. E. Keeler, Kansas City
Jackson	W. M. Kitchen, Kansas City
Jackson	F. J. McCoy, Kansas City
Jackson	P. W. Meyer, Kansas City
Jackson	G. L. Miller, Kansas City
Jackson	W. C. Mixson, Kansas City
Jackson	R. W. Stockton, Kansas City
Jackson	W. F. Wilhelm, Kansas City

Eighth District

Barton-Dade	
Dallas-Hickory-Polk	O. A. Griffin, Buffalo
Greene	Stanley S. Peterson, Springfield
Greene	J. P. Ferguson, Springfield
Greene	Kenneth E. Knabb, Springfield
Jasper	S. W. Scorse, Joplin
Jasper	W. T. McNew, Carthage
Ozarks	
Barry	R. R. Donley, Monett
Lawrence	Kenneth Glover, Mt. Vernon
Stone	Fred Wommack, Crane
Christian	S. D. Roper, Ozark
Taney	
Newton	M. C. Bowman, Neosho
McDonald	J. J. Royce, Noel
Webster	T. M. Macdonnell, Marshfield

Ninth District

Mid Missouri	
Phelps	M. K. Underwood, Rolla
Crawford	
Dent	B. J. Bass, Salem
Pulaski	
Maries	
Laclede	H. W. Carrington, Lebanon
South Central	
Howell	J. N. Wiles, West Plains
Oregon	C. W. Cooper, Thayer
Texas	
Wright	
Douglas	
Ozark	

Tenth District

Butler-Ripley-Wayne	Fred J. Biggs, Poplar Bluff
Cape Girardeau	P. G. Wolff, Cape Girardeau
Dunklin	W. D. English, Cardwell
Mineral Area	
St. Francois	H. M. Roebber, Bonne Terre
Iron	M. C. Menne, Ironton
Madison	
Washington	
Reynolds	
St. Genevieve	
Pemiscot	

Perry	A. E. McDermott, Perryville
Semo	
Stoddard	S. Parks, Bloomfield
New Madrid	
Mississippi	
Scott	W. O. Finney, Chaffee

The President, Ralph Perry, M.D., Kansas City, delivered the invocation.

Registration opened on Sunday.

Robert B. Bassett, M.D., St. Louis, gave a preliminary report of the Committee on Credentials. The Speaker announced that the roll call would be marked from the delegates' credential cards.

Leonard T. Furlow, M.D., St. Louis, reported briefly for the General Committee on Arrangements.

SPEAKER: The next order of business is the reading of the minutes of the previous meeting. These were published in the July 1959 issue of MISSOURI MEDICINE.

Dr. Hampton served as Speaker.

Upon motion, duly seconded, the minutes were approved as published.

The Speaker gave instructions to the delegates and appointed the following Reference Committees:

REFERENCE COMMITTEE ON MISCELLANEOUS AFFAIRS

Emmett B. Drescher, M.D., St. Louis, Chairman.
Gerald L. Miller, M.D., Kansas City.
Kenneth Glover, M.D., Mount Vernon.
Daniel L. Sexton, M.D., St. Louis.
G. D. Shull, M.D., Jefferson City.

REFERENCE COMMITTEE ON REPORTS OF OFFICERS

James C. Cope, M.D., Columbia, Chairman.
Francis L. Kozal, M.D., Crystal City.
Jerome I. Simon, M.D., St. Louis.
Charles M. Lederer, M.D., Warrensburg.
C. L. Clark, M.D., Trenton.

REFERENCE COMMITTEE ON CONSTITUTION AND BY-LAWS

Arthur W. Neilson, M.D., St. Louis, Chairman.
Philip L. Byers, M.D., Kansas City.
Reinhardt D. Dwyer, M.D., North Kansas City.
M. T. English, M.D., Kirksville.
Claude W. Cooper, M.D., Thayer.

REFERENCE COMMITTEE ON RESOLUTIONS

John F. Bowser, M.D., Kansas City, Chairman.
Robert Kingsland, M.D., Clayton.
J. Loren Washburn, M.D., Versailles.
Herbert C. Wiegand, M.D., St. Louis.
Forrest C. Long, M.D., Savannah.

REFERENCE COMMITTEE ON MEDICAL EDUCATION AND PUBLIC WELFARE

John P. Ferguson, M.D., Springfield, Chairman.
Paul W. Meyer, M.D., Kansas City.
Paul G. Wolff, M.D., Cape Girardeau.
George L. Hawkins, M.D., St. Louis.
Jack N. Wiles, M.D., West Plains.

REFERENCE COMMITTEE ON NECROLOGY

John W. Middleton, M.D., Louisiana, Chairman.
Richard A. Sutter, M.D., St. Louis.
Olin A. Griffin, M.D., Buffalo.
C. G. Stauffacher, M.D., Sedalia.
Harry M. Roebber, M.D., Bonne Terre.

Ralph Perry, M.D., Kansas City, presented the President's Message. (This appeared as a Special Article in the May 1960 issue of MISSOURI MEDICINE).

Speaker Hampton sat aside as President Perry gave the President's Message.

The Speaker referred the President's Message to the Reference Committee on Reports of Officers.

Raymond O. Muether, M.D., St. Louis, presented the Recommendations of the President-Elect. (This appeared as a Special Article in the May 1960 issue of MISSOURI MEDICINE.)

The Speaker referred the Recommendations of the President-Elect to the Reference Committee on Reports of Officers.

The report of the Secretary, John I. Matthews, M.D., Jefferson City, follows:

REPORT OF THE SECRETARY

On December 31, 1959, the official membership of the Association was as follows:

Number of Members, January 1, 1959	3,751
New Members	167
Members Reinstated	5
Total	3,923
Members Dropped	13
Members Deceased	76
Members Transferred	58
Members Resigned	6
Total	153
Number of Members, December 31, 1959	3,770

The Committee on Nominations, which is appointed by the President from the House of Delegates, must submit nominations for the following officers:

Three Vice Presidents to fill the expired terms of James R. Meador, Clayton; G. D. Shull, Jefferson City; J. J. Wimp, Kirksville.

Two Delegates and corresponding alternates to the American Medical Association to fill the vacancies created by the expiration on December 31, 1960, of the terms of Durward G. Hall, Springfield; Alternate, Guy N. Magness, University City; H. E. Petersen, St. Joseph; Alternate, J. Loren Washburn, Versailles.

A Speaker and a Vice Speaker of the House of Delegates to fill the expired terms of Oscar P. Hampton, University City, Speaker, and William C. Mixson, Kansas City, Vice Speaker.

The terms (two years) of the Councilors of the odd numbered districts expire this year:

Donald M. Dowell, Chillicothe, First District; Leonard T. Furlow, St. Louis, Third District; Byron M. Stuart, Boonville, Fifth District; Kenneth C. Holweg, Kansas City, Seventh District; J. H. Summers, Lebanon, Ninth District. Delegates from these districts shall meet during the session, prior to the last day, and elect the Councilor for their District. The election shall be certified to the House of Delegates on a prescribed form which will be furnished. Lists of Delegates from the various districts will be available to the Councilors and may be checked for those present at the Registration Desk at the session.

The session will be held in the Sheraton-Jefferson Hotel. The first session of the House of Delegates will convene on Sunday, March 13, at 1:30 p.m., in the Crystal Room. Reference committees will meet in committee rooms in the hotel following the session. The second session of the House of Delegates will meet at 4:30 p.m. on Monday, March 14, also in the Crystal Room. The final session of the House will meet at 1:30 p.m., Wednesday, March 16.

Registration will be open on Sunday, March 13, from 12:30 p.m. to 3:00 p.m., and from 8:00 a.m. to 5:00 p.m. on Monday and Tuesday, and from 8:00 a.m. to 12:00 noon on Wednesday. Registration will be on the Mezzanine floor, Sheraton-Jefferson Hotel.

JOHN I. MATTHEWS, Secretary.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Executive Secretary, Mr. Tom R. O'Brien, follows:

REPORT OF THE EXECUTIVE SECRETARY

The reports of the Council and of the Committees describe the activities of the Association during the last year. It is difficult to single out any one accomplishment, though the final passage of the "Single Licensure Act" by the State Legislature may be regarded by many members as a significant achievement in view of the time, effort and thought expended.

All Council and Committee meetings were attended by Mr. McIntyre, Miss Penn or myself or by all of us. The work of the Officers, Councilors, Committeemen and other members in devoting their time to the problems of the Association is often overlooked by the members. I wish to thank them all for their kindness and understanding to me and to the staff.

The members of the office staff have worked long and hard for the welfare of the Association. I wish to thank each and every one of them for their able assistance to me and the Association.

TOM R. O'BRIEN, Executive Secretary.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Treasurer, Charles R. Doyle, M.D., St. Louis, follows:

REPORT OF THE TREASURER

The report of the Treasurer is covered in the Financial Statement of the Association for 1959 which appeared in the March issue of MISSOURI MEDICINE. Also the Financial Statement was sent to all county medical societies and to all delegates in mimeograph form to conform to the by-laws. Since the component societies have had the report and it appears in MISSOURI MEDICINE prior to the session, it is not repeated in these reports.

CHARLES R. DOYLE, Treasurer.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Scientific and Postgraduate Work, John I. Matthews, M.D., Jefferson City, Chairman, follows:

REPORT OF THE COMMITTEE ON SCIENTIFIC AND POSTGRADUATE WORK

One phase of the work of the Committee on Scientific and Postgraduate Work is the arranging of the program for the Annual Session. It is always the hope of each Committee that this will appeal to a large proportion of the membership. The Committee has spent much time on analyzing past annual sessions and has tried diligently to retain those parts of former programs that met with the greatest approval, as shown by attendance, and to add some new features which the Committee hopes will attract even more members to the session.

The Committee feels that it has been fortunate in obtaining speakers and subjects that will have a wide appeal and that each member will find much that is practical in the presentations at the session, believing that the main purpose of the scientific program is securing information that will aid in the every-day practice of medicine. The Committee hopes that the program meets with the approval of the membership.

Appreciation and recognition is hereby given to various specialty groups who gave valued assistance in the development of the program and are sponsoring some of the outstanding speakers. These specialty groups are Missouri Diabetes Association, Missouri Heart Association, Missouri Society of Internal Medicine, Missouri Surgical Society and the St. Louis Gynecological Society.

The Committee is pleased with the number and quantity of postgraduate and refresher courses which are being made available over the state, through regular meetings of county medical societies, through medical schools' postgraduate departments, through Missouri Academy of General Practice and its local chapters' sponsored programs, through various clinical conferences such as the Kansas City Southwest Clinics, the Southeast Missouri Cancer Conference sponsored by the Cape Girardeau County Medical Society, the Ozark Empire Cancer Conference sponsored by the Greene County Medical Society, the two-day Spring Clinical Conference at the University of Missouri Medical Center, through fall and winter 32 lecture postgraduate courses sponsored by the St. Louis Medical Society in cooperation with the faculties of Missouri, St. Louis and Washington Universities Schools of Medicine, and through many refresher and postgraduate programs arranged by various specialty organizations.

Dr. Julian moderated a panel in the scientific session.

The Committee on Scientific and Postgraduate Work arranged the program at meetings during the year.

During the last year the fine established cooperative relationship for furnishing and sponsoring scientific programs for various medical society meetings has been maintained between this Committee and the Education Committee of the Missouri Academy of General Practice. Duplications and conflicts in meetings and programs have been held to a minimum through this working together. Other organizations such as the Cancer Society and the Heart Association have worked with this Committee in scheduling their meetings so that conflicts might be prevented. In this respect, through the headquarters office, we are serving as a somewhat needed clearing house for the scheduling of larger, irregular medical meetings.

The Committee is grateful to the postgraduate departments of the three medical schools in Missouri for the cooperation they are giving in helping to bring practical, up-to-date, scientific information to practicing physicians over the state.

The Committee wishes to take this opportunity to express its thanks and appreciation to all of those physicians who have appeared on the many scientific postgraduate programs held over Missouri during the last year.

John I. Matthews, Chairman,
Robert Smith,
Kenneth K. Keown,
Wyeth Hamlin,
Wilbur Mullarky,
J. H. Keim,
W. P. Maddux,
M. Pinson Neal,
John A. Growdon,
James G. Janney,
Hector W. Benoit.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Publication, Charles R. Doyle, M.D., Chairman, follows:

REPORT OF THE COMMITTEE ON PUBLICATION

The 56th volume of Missouri Medicine was completed with the December 1959 issue. During 1959 there were published 45 scientific articles, one clinical pathologic conference, nine case reports, nine special articles, 21 editorials, 11 President's pages, 11 Wash-

The Editor, Dr. Doyle, Drs. Jackson and Trolinger and Miss Penn confer about Missouri Medicine.

ington, 11 Across Missouri, 11 Missouri Academy of General Practice, 4 Division of Health, 11 Woman's Auxiliary, 11 Musings of the Field Secretary, 266 news items, 107 Councilor District News, 166 new members, 69 deaths, 11 Missouri Medicine in Review, 32 From the Medical Schools, two abstracts on tuberculosis, 41 miscellaneous articles, 11 articles on organization, four articles on legislation, minutes of the House of Delegates and minutes of two meetings of the Council, 50 books received, 23 book reviews, two rosters and one financial statement. There were 654 pages of reading material, 786 pages of advertising and 188 pages of inserts.

Advertising in MISSOURI MEDICINE from January 1, 1959, to December 31, 1959, earned $76,239.21. Subscriptions of nonmembers amounted to $210.23 making $76,449.44 earned by the publication. The cost of production (printing and illustrations) was $42,969.19.

CHARLES R. DOYLE, Chairman,
RICHARD H. KIENE,
C. G. STAUFFACHER,
R. O. MUETHER,
BEN M. BULL.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Defense, C. E. Hyndman, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON DEFENSE

The Committee on Defense has had no case reported to it during the year and has had no meeting of the Committee.

C. E. HYNDMAN, Chairman,
ROLAND S. KIEFFER,
W. W. GIST,
L. P. FORGRAVE,
RONALD F. ELKINS.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Public Policy and Public Relations, R. O. Muether, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND PUBLIC RELATIONS

The Committee continued, as it has for a number of years, purely on a standby basis to provide, in case of need, a representative cross-section of medical opinion and a responsible member in every area of the state for the purpose of assisting the officers and Council in the execution of any extraordinary program of public information or persuasion. Need for the active service of the Committee did not arise in the year just passed.

The Chairman has, however, maintained close contact with the policy deliberations of the Council and with the communications activities carried out during the year under the direction of the officers and the Executive Secretary. It is his view that the public relations side of Association affairs is adequately and economically provided for under the existing arrangements and that this standing Committee should be kept in being on its present stand-by basis, particularly through the current election year, in view of the possibility that special efforts may be required to communicate with the people of the state.

R. O. MUETHER, Chairman,
C. C. COHRS,
R. J. CRIDER,
ROLLA B. WRAY,
JAMES E. MCCONCHIE,
C. B. SCHOEBERL,
H. W. CARRINGTON,
JOHN R. DIXON,
R. R. LYLE.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Medical Education and Hospitals, Kenneth Glover, M.D., Mount Vernon, Chairman, follows:

REPORT OF THE COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

The Committees on Medical Education and Hospitals and Rural Medical Service held a combined meeting during the year.

This Committee met in joint session with the Committee on Rural Medical Service of the State Association on Sunday, January 17, 1960, at the Missouri Hotel in Jefferson City. Dr. Vernon E. Wilson, Dean of the University of Missouri Medical School, was invited to meet with the committees and to discuss as he saw fit problems concerning the University of Missouri Medical School and to offer suggestions as to how he thought these two committees might work with the Medical School to the mutual advantage of all concerned.

The minutes of that meeting will serve as the major portion of this Committee's report and are submitted as follows:

Presiding.—Because the chairmen of neither committee could be present due to bad weather, Ralph R. Coffey, M.D., Kansas City, was asked to preside. Those present were Drs. Coffey; Ralph Perry, Kansas City; Jack Mullen, Bonne Terre; C. Alex McBurney, Slater; C. H. Lewellen, Louisiana; William J. Shaw, Fayette; Vernon E. Wilson, Columbia; Mr. Raymond McIntyre and Helen Penn of the State Association staff. Daniel J. Schler, Ph.D. and Mr. Hugh Denney, Columbia, of the Community Development Program, were present.

Dr. Wilson.—Dr. Coffey greeted Dr. Wilson and asked him to present problems of the University of Missouri School of Medicine in which the practicing physician and the State Medical Association could be of help.

Dr. Wilson pointed out that the ultimate aims of both the practicing physician and the school to provide good medical care to the citizens of Missouri were the same and that greater communication was to be desired. He said that there might be times when decisions at the University would have to be on the basis of medical education requirements versus medical care, but that he wished understanding between the two on such occasions.

As specific things, Dr. Wilson pointed out:

1. He would like to know personally when the medical school was not performing as expected.
2. He would like to spend time at medical society meetings to promote better communication, not necessarily as a part of the program but to meet individual doctors and to listen.
3. Better communication between physicians and the school must be established.

As illustrations of the things he specifically would like advice and help upon he named the following:

1. There are continually recurring requests for physicians to locate in specific communities and a way to encourage physicians to go to smaller communities is needed.
2. The state is operating two state hospitals in Columbia, the University Hospital and the Ellis Fischel State Cancer Hospital, the latter being a nonteaching institution, with no coordination between the two.
3. Relations with welfare departments, especially the social workers. To whom should information go when an indigent patient is discharged from the hospital, to the local welfare department or the referring physician.
4. With OASI patients, should reports go to referring physicians or to the OASI agency.
5. The Medical Center as now financed (between 4 and 5 million per year from the state) will need to earn from 30 to 40 per cent of its income as 7 to 8 million dollars is needed per year to operate. The state must provide more money or the public must be better informed on charges for services to patients who can pay all or part.

Discussion.—In the discussion it was brought out that there is a great deal of misinformation about the administration of the hospital in charging; that the allowance that staff members can make over their salary may need to be raised; costs may be greater for a patient because some tests are done for educational purposes; that the hospital probably should determine indigency rather than the referring physician or county welfare office; better liaison is needed between the referring physician and the hospital; that too many citizens of Missouri believe the hospital to be a free state hospital and that greater understanding is needed; that the hospital can attract the referral of patients only by a low cost to the patient or an outstanding staff, except that many expensive diagnostic and treatment procedures can be maintained there that would be prohibitive in a small community.

Outpatient Service.—Dr. Wilson reported that on April 1, a barracks building would be used to house outpatients at a low cost on an experimental basis.

Placement Service.—Physician Placement Service by the University and by the Association was discussed and it was felt that closer cooperation on this was necessary.

PRECEPTORSHIP PROGRAM

Dr. Wilson pointed out that there were two methods for a preceptorship program, the one now in use which is elective and one which would be compulsory as an integral part of the fourth year of medical study. In the latter, it would be necessary to have a rather permanent staff of preceptors and these would be in closer touch with the school. Dr. Wilson said that this is something that the school and the Association should decide together.

The Committee on Medical Education and Hospitals is working closely with the University of Missouri Medical School in securing physicians from small towns in Missouri to serve as preceptors for senior medical students. A six-week elective preceptorship training period is offered to the M.U. medical students during their senior year. Twenty seniors of the 1959-60 class will have taken this training during the period from December 4, 1959 through May 25, 1960.

RECRUITMENT

Recruiting more students to study medicine was discussed and it was pointed out that finances was a big item to the possible medical student. It was suggested that a loan fund be established, with a possible assessment of the membership of the Association to set up the fund. Dr. Perry was asked to present this suggestion to the Council for further study.

Dr. Muether gave the Recommendations of the President-Elect.

Action.—As there was not a quorum present of either committee, and as the purpose of the joint session, with Dr. Wilson, had been principally informational, no actions were taken.

COMMUNITY DEVELOPMENT PROGRAM

Dr. Schler and Mr. Denney spoke briefly on the work of the Community Development Program at the University of Missouri and gave literature to the members present. One illustration of their work was given as putting the Illmo, Mo., community in touch with the Sears Foundation which ultimately resulted in the building of a medical clinic building in the town. A physician is now being sought by the community to occupy the clinic.

KENNETH GLOVER, Chairman,
WILLIAM A. KNIGHT, JR.,
GEORGE J. L. WULFF,
DOYLE C. MCCRAW,
RALPH R. COFFEY,
J. S. RODEN.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Cancer, Marvin L. Napper, M.D., Springfield, Chairman, follows:

REPORT OF THE COMMITTEE ON CANCER

The Committee as a whole did not officially meet during the last year. Dr. H. M. Hardwicke, Acting Director of the Missouri Division of Health, Jefferson City, submitted to the Council of the Missouri State Medical Association certain proposals having to do with cancer control and the Ellis Fischel State Cancer Hospital. The proposals were referred by the Council to this Committee and are quoted as follows:

(1) "Cancer Control—Areas of need are apparent within the field of public health activities in relation to cancer control. The State of Missouri operates the Ellis Fischel State Cancer Hospital. This hospital receives only patients certified by county courts as medically indigent and referred by practicing physicians who have made the diagnosis of cancer. Once a patient has been referred to the Cancer Hospital, the referring physician tends to lose all contact with that patient until a discharge summary is forwarded to the referring physician. It is suggested that physicians be kept advised of the progress of their patients while in the Cancer Hospital and they be invited to observe in person the therapy which their patients receive."

(2) "The senior staff at the Ellis Fischel State Cancer Hospital will be made available to medical societies throughout the state for discussion of the latest developments in cancer therapy. They will also be made available to communities to discuss with individuals their personal responsibility for cancer control. The senior staff members of the Cancer Hospital will appear at community meetings only upon the invitation of the local medical society."

Proposal (1) is well considered and this Committee recommends it be carried out. In addition a detailed report of specific therapy to the local physician at dismissal plus suggestions about continued general medical management would be helpful. Proposal (2) is approved by the Committee. The Committee is informed that some county medical societies have had scientific programs during the last year presented by senior staff members from Ellis Fischel State Cancer Hospital. The Committee suggests that proposal (2) be brought to the attention of the State Association Committee on Scientific and Postgraduate Work and to the secretaries of all county medical societies.

Marvin Napper, Chairman
James R. McVay, Jr.,
Milton Shoss,
Charles Lockhart,
Byron E. Watts,
John E. Lamy,
E. Kip Robinson,
George A. Carroll,
John Modlin,
Henry C. Allen,
Joseph L. Fisher.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Medical Economics, A. P. Rowlette, M.D., Moberly, Chairman, follows:

REPORT OF THE COMMITTEE ON MEDICAL ECONOMICS

The Committee met and considered several items which were referred to it by the Council. These were: The possibility of the State Health Department assuming responsibility for administration of medical indigent care programs; pilot programs to be developed by the State Health Division in Home Maker and Home Nursing Care Programs.

In addition, the Committee considered the present status of the Vendor program for hospitalization and nursing home care for recipients of public assistance funds for the needy in Missouri.

A letter from the Medicare authorities in Washington regarding restoration of certain benefits of that program was also considered. A bulletin about these changes was sent to all members on December 31, 1959.

The report of the Committee's actions and recommendations was submitted to the Council at its meeting December 12, 1959. The Council accepted the report as follows:

DIVISION OF HEALTH

Dr. Hardwicke reviewed some of the work of the Division of Health and read a letter from the A.M.A. which outlined the functions of a public health department, as follows:

Letter from A.M.A. to Missouri Division of Health, October 27, 1959.—"The committee is strongly of the opinion that the basic services of the departments of public health should be limited to the fields of vital statistics, public health education, environmental sanitation, public health laboratory services, prevention of disease and control of communicable diseases such as the diseases of childhood, venereal diseases and tuberculosis. The committee is of the opinion that under no circumstances and under no guise whatever should public health departments enter into the diagnosis of disease, except for the aforementioned purposes and in the case of indigents, and further that public health departments should undertake no treatment of disease except in the case of indigents, with the exception of venereal disase and tuberculosis in such instances as when the treatment of nonindigents is not available through private sources."

At this time, the State Division of Health is responsible for the following indigent care programs:

1. Ellis Fischel State Cancer Hospital, Columbia, Mo. This hospital was assigned to the State Division of Health after the adoption of the new Missouri Constitution in 1946. The State Cancer Commission is in charge of the patient care aspects of this institution.

Patients are accepted for care and treatment when they are referred by a physician and when the county court certifies that they are indigent. At present, the hospital is operating at 104 per cent of capacity.

2. Trachoma Hospital, Rolla, Mo. This hospital is closed. However, a clinic for eye care is conducted for a short time, twice per week. Patients are eligible for care if they have trachoma or have had the disease. All others are referred to practicing physicians for treatment.

3. State Tuberculosis Hospital, Mt. Vernon, Mo. Patients are accepted in this hospital, whether indigent or not, for care and treatment of tuberculosis.

Dr. Hardwicke stated that he attended a recent meeting of the State and Territorial Health Officers in Washington, D. C. A copy of a proposed bill (to be introduced in Congress in 1960) and a statement regarding "health department administration of indigent medical care programs" were developed. An informal poll of

State Health Officers is to be made on the following questions:

a. If requested, could your state health department assume responsibility for the administration of the medical care program for the needy in your State?

b. If requested, would you, as a state health officer, be willing to assume this responsibility?

In addition, the Executive Committee of the State and Territorial Health Officers is "to study, both independently and in cooperation with the A.M.A. and the American Public Health Association, possible methods, other than those proposed by the Forand Bill, for providing medical care for needy people not provided for under present programs."

The Committee discussed this question thoroughly and agreed that further information about indigent care programs under other state health departments should be obtained. It was stated that Maryland and Florida are now operating such programs. The committee deferred action on this subject until a later meeting.

HOME MAKER AND HOME CARE PROGRAMS

Dr. Hardwicke asked for the approval of pilot programs, in areas where county societies approve, of home maker and home nursing care programs.

A *home maker* program is one in which the health department secures the cooperation of lay volunteers who will work an average of three hours per week. Such work would be requested by the private physician through a public health nurse for services in the home of sick patients. Such work might consist of making beds, cleaning and other household routines.

A *home nursing* care program is one in which the health department secures a roster of registered and practical nurses who are not working at their profession. Such persons may be willing to devote a few hours per week to perform nursing duties in the home of sick patients. They would be paid by the sick person and would work under the supervision of the attending physician. Thus, certain patients could be cared for at home instead of in hospitals.

The Committee considered many aspects of these programs, including the fact that our standing committee on aging has been concerned with the same programs. It was agreed that if such programs should be approved, they should be on a pilot study basis and that a report should be made to the committee in a reasonable length of time. In view of the fact that the MSMA Committee on Aging is studying these same programs, it was agreed to defer final action until a later time.

VENDOR PROGRAM

Hospitalization.—The rules and regulations of the State Division of Welfare for the hospitalization of eligible recipients have been outlined. These were developed by the Director with the assistance and advice of an Advisory Committee of seven persons. MSMA members on this Advisory Committee are: Dr. Avery Rowlette, Chairman, Committee on Medical Economics and Dr. Stanley S. Peterson, Chairman, Committee on Aging.

The act took effect on August 29, 1959. In substance, that act provides that an eligible recipient of public assistance funds is entitled to receive in-patient hospital care for the treatment of a medical emergency or acute serious illness. "A medical emergency or acute serious illness" is one which places a patient's life in danger, and therefore requires immediate hospitalization.

The patient must be hospitalized in a hospital licensed by the State Division of Health. Claims for reimbursement for any one admission shall not exceed 10 days care. Claims for reimbursement for any recipient for any fiscal year, July 1 through June 30 of next year, shall not exceed twenty days.

"Completely Bedfast and Totally Disabled."—Payments made to a recipient of public assistance who is completely bedfast and totally disabled shall not exceed $100 per month. In order to qualify, the patient must be (a) completely nonambulatory, to the extent that he cannot or should not leave the bed except by being lifted bodily; and (b) must have been confined for at least the past 30 days and will be completely bedfast for at least an additional 90 days; and (c) must be unable to participate in any gainful activity.

DISCUSSION

After 90 days, December 1, 1959, the State Division of Welfare will evaluate the program to see whether or not the program may be running under or over the monthly allocations for the programs. If under, the hospital rate of $5.00 per diem may be increased. If over, the amount will be lowered.

It was reported to the Committee that various county courts which had made payments to the hospitals for the care of recipients of public assistance have refused to continue such payments. As a result, these hospitals are receiving only the amount paid by the State Welfare Division. In many instances the hospitals are receiving less than formerly. It was pointed out, however, that only a few county courts had been making payments. It seems too early to evaluate the results now.

Drs. Quer, Hallenbeek and Thompson chat between sessions.

It was recommended that an effort be made to obtain exact information as to how many county courts which paid hospitals prior to the Vendor law now refuse to pay them.

The Committee again wishes to present information for members as to the extent of Blue Cross-Blue Shield coverage in Missouri in 1959.

MISSOURI MEDICAL SERVICE (BLUE SHIELD)

Membership, December 31, 1958	494,519
Membership, November 30, 1959	544,733
Reserve per agreement, November 30, 1959	$18.83
Reserve per participant, November 30, 1959	$ 7.40

Number of cases paid	115,574
Amount paid during the year	$7,150,818

KANSAS CITY BLUE SHIELD SURGICAL-MEDICAL CARE

Membership, December 31, 1958	426,824
Membership, November 30, 1959	432,274
Reserve per agreement	$13.48
Reserve per participant	$ 5.14
Number of cases paid	208,354
Amount paid during the year	$5,504,023.97

ST. LOUIS BLUE CROSS

Membership, December 31, 1958	869,392
Membership, November 30, 1959	904,992
Reserve per agreement, November 30, 1959	$16.56
Reserve per participant, November 30, 1959	$ 6.47
Number of cases	167,855
Number of days	1,058,956
Average day stay per case	7.90
Amount paid during the year	$19,985,572.00

KANSAS CITY BLUE CROSS HOSPITAL SERVICE

Membership, December 31, 1958	464,799
Membership, November 30, 1959	468,929
Reserve per agreement	$20.90
Reserve per participant	$ 7.94
Number of cases hospitalized	92,155
Number of days hospitalized	569,989.5
Average day stay per case	7.8
Amount paid during the year	$10,801,555.48

A. P. Rowlette, Chairman,
George L. Hawkins,
John R. Forgrave,
A. B. Smith,
R. D. Duncan,
G. W. Winn,
E. D. Imes,
John T. Crowe,
Robert E. Kirshman.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Mental Health, John J. O'Hearne, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON MENTAL HEALTH

The Committee has not met since the last session of the House of Delegates. However, recommendations contained in the 1959 report dealt mainly with legislation which was pending at the time in the Missouri Legislature and two acts were adopted that had been recommended and urged by the Committee and the Association.

S.B. 18 was adopted. This law authorized the head of a state mental hospital to place suitable patients in a boarding or family home, the costs to be met from state mental hospital funds.

H.B. 47 was adopted. This law authorized Missouri's cooperation in an interstate compact on hospitalization for mental illness. The laws of most states provided that mentally ill persons must be residents of the state involved to be eligible for hospitalization at public expense. This legislation makes it possible for Missouri to join in an agreement with other states to facilitate the care and treatment of persons who become mentally ill in a state other than their own by making reciprocal arrangements for care or financing.

S. Bills 136 and 137, which would create a Department of Mental Diseases, separating it from the Department of Public Health and Welfare, of which it is now a division, were defeated in Senate Committee.

John J. O'Hearne, Chairman,
Robert J. Mueller,
H. V. Guhleman,
James N. Haddock,
D. R. Edwards,
A. L. Brown,
Arnold S. Block,
Albert Preston,
N. Venay Bolin.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Maternal Welfare, James E. Keeler, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON MATERNAL WELFARE

A regular meeting of the Committee on Maternal Welfare was held on January 10, 1960, at the Missouri Hotel in Jefferson City, with Dr. James E. Keeler, Kansas City, presiding. Those present were: Drs. Keeler, William See, Columbia; E. E. Wadlow, St. Joseph; A. C. Trueblood, St. Louis; Eugene G. Hamilton, St. Louis; Irwin T. Craig, Joplin; J. J. Wimp, Kirksville; William J. Cassell and H. M. Hardwicke and Mr. Thomas Dundon, State Division of Health, Jefferson City; Mr. Ray McIntyre and Helen Penn, State Association staff, St. Louis.

The discussion, actions and recommendations of the Committee at this meeting follow and represent the Committee's report:

ANNUAL SESSION LUNCHEON

It was announced that Michael Newton, M.D., Jackson, Miss., professor and chairman of the department of obstetrics and gynecology of the University of Mississippi Medical School, would appear on the program at the annual session and would take part in proceedings at the luncheon meeting of the Committee, to be held Monday, March 14. It was decided that the St. Louis and the Kansas City Gynecological Societies would each have

The Committee on Maternal Welfare held a luncheon meeting.

two cases dealing with toxemia ready for presentation at the luncheon meeting.

ANNUAL REPORT

It was decided that the minutes of the present meeting would constitute the report of the Committee to the House of Delegates.

MORTALITY

Dr. Cassell stated that the infant mortality rate has gone up for the first time in twenty years, and he expects the maternal mortality figures will probably be higher than at any time since 1930. It is believed by the Committee that a part of the increase in maternal mortality is the result of better reporting and case finding, and that with the inclusion of the new question about pregnancy on the death certificate we may expect an even higher rate in the near future. It was also pointed out that several deaths had resulted from pneumonia and Asian influenza during the last year.

FISCAL YEAR

The difference in the fiscal year of the Committee and the Division of Health was discussed. The Maternal Welfare Committee currently ends its fiscal year on November 1 in order to have time for case finding and review prior to the annual meeting of the Missouri State Medical Association. With the usual lag in death certificates it is at the present time impossible to end this on a calendar year. No action was taken.

The Committee on Maternal Welfare met during the year.

DEATH CERTIFICATE

The question concerning recent pregnancy on the death certificate has met with opposition in some quarters, and reporting has been inadequate. Members of the Committee were asked to emphasize in their locales the importance of this question and to urge that it be reported accurately if at all possible.

MATERNAL WELFARE EDUCATION

The Committee was concerned with achieving as wide as possible a publication of the results and work that the Committee is doing since the material is largely educational in nature and is of no use if kept in Committee files. Only three requests for programs on Maternal Welfare had been received during the year. As means of further disseminating the information gathered by the Committee it was decided that case reports would be submitted to MISSOURI MEDICINE, at county medical societies, that they would be encouraged to have more programs, and that this material also be carried to meetings of the Academy of General Practice if this is possible. In addition, Dr. Cassell stated that the Missouri medical schools would like copies of the cases studied, together with recommendations made. It was also decided that the report of findings after review of the case be sent to all physicians involved and to hospitals involved. The report could be written in such a way that no identification of the case could be made by any outsider.

STATE ORGANIZATION

In order to coordinate the work of the Maternal Welfare Committees of the eastern and western divisions of the state better, the current Committee recommends that two additional meetings of the State Maternal Welfare Committee be held. It was suggested that these meetings be held in May and September, in addition to the usual meeting in January.

BIRTH CERTIFICATE

A suggested revised birth certificate was presented to the Committee. It was pointed out that while it was longer than the former one and contained more questions, it allowed checking of points and therefore would take less time to fill out. After discussion, it was decided that it would be studied by the Committee members and discussed by them with local physicians, with reports then given to Dr. Keeler not later than March 1. A suggested hospital work sheet was also presented for study.

JAMES E. KEELER, Chairman,
WILLIAM B. SEE,
E. E. WADLOW,
JOSEPH M. KREBS,
JOSEPH L. JOHNSTON,
P. V. SIEGEL,
H. C. WILLUMSEN,
A. C. TRUEBLOOD,
IRWIN T. CRAIG,
J. J. WIMP,
FORREST C. LONG,
E. G. HAMILTON,
A. B. SINCLAIR.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Infant and Child Care, E. J. Schwarts, M.D., Springfield, Chairman, follows:

REPORT OF THE COMMITTEE ON INFANT AND CHILD CARE

There has been no formal meeting of the full membership of the Committee during the last year. However, various members of the Committee have been meeting on numerous occasions with other groups and organizations in the state who are concerned with the health care of the school age child.

In the spring of 1959, following a suggestion of the Committee, a top-level state planning meeting on school health was held in Jefferson City, with the Director of the Missouri Division of Health, the State Commissioner of Education, a representative of the Missouri Dental Association, a representative of the Missouri Congress of Parents and Teachers, and members of the Committee participating.

Good progress is already evidenced from the planning conference, to wit: a request was made to the Missouri Association of School Administrators for time on the association's state-wide workshop program to be held at the University of Missouri in June, 1959. This time was to be used to explain briefly to the administrators of Missouri's schools certain basic school health policies that the state-wide school health planning group was considering, and to point out certain services members of the planning group were willing and able to offer local school health programs. The request being granted, the Chairman of the Committee, with three other representatives of the planning group, spoke before 400 Missouri school administrators on June 25. It is believed that this direct contact with the members of the Missouri Association of School Administrators will bear good fruit in the future.

Other small group discussion sessions have been held with the Director of the Missouri Division of Health and the State Commissioner of Education and other members of their respective departments to discuss certain specific items involved in setting up school health programs. One of these items is the problem of immunizations. It is felt by this Committee that local doctors through their local medical societies working with other local groups can best determine how immunization programs should be handled in their particular localities.

The Committee has recently been invited in cooperation with the State Division of Health, State Department of Education and the PTA to study and revise the handbook which the state PTA furnishes to each chairman of the county PTA over the state. This is a handbook on health and is concerned with projects and efforts of the local PTA's to promote school health. The cooperation of this Committee will be given to the study and revision of the PTA health handbook.

This Committee was represented by Dr. Guy Magness, University City; Dr. E. J. Schwartz, Springfield; and Mr. Ray McIntyre, Field Secretary of the State Association, at the 7th National Conference on Physicians and Schools held at Highland Park, Illinois, October 13-15, 1959. This conference is sponsored primarily by the Department of Health Education of the American Medical Association every two years and receives the cooperation of many state and national groups, organizations and agencies interested in the health of our youth.

The general purposes of these conferences are to clarify problems, to help develop understanding, and to improve relationships among the professions concerned with the health and fitness of youth.

The Committee is continuing to promote the formation of county medical society committees throughout the state to consider problems concerning the health of the school aged child on the local level. It is hoped that these county medical society committees will become more active and that they will call upon this Committee for assistance at their pleasure.

E. J. Schwartz, Chairman,
Daniel B. Landau,
H. E. Petersen,
R. J. LaDriere,
Guy N. Magness,
L. L. Davis,
James J. Pascoe,
Jack N. Wiles,
James A. Kinder,
Sanford F. Cockerell.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Health and Public Instruction, John R. McDaniel, M.D., St. Joseph, Chairman, follows:

REPORT OF THE COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

The Committee on Health and Public Instruction met in St. Louis at the Coronado Hotel on June 28, 1959. The following were present: Drs. John R. McDaniel, St. Joseph, Chairman; J. Earl Smith, St. Louis; E. A. Belden, Jefferson City; Mr. Ray McIntyre and Miss Helen Penn, State Association staff, St. Louis.

Due to unforseen circumstances a quorum of the Committee was not present. As a result, it was decided to proceed with the items on the agenda and to send by mail minutes of the meeting to the absent members for their approval. The minutes were approved by mail.

The Committee on Health and Public Instruction met with small attendance because of bad weather.

The following report was then presented to the Council of the Association and approved on September 26:

The Chairman reviewed the purpose of the Committee and the present meeting as well as the history of the Committee.

STATE FAIR

It was reported that the MSMA had stopped exhibiting at the Missouri State Fair because space allotted had not been satisfactory in recent years—commercial exhibits being interspersed in health exhibits. It had originally been in the Education Building, which became the Commercial Building, and the plan for exhibits dealing with health to be placed together had not worked out. It was the consensus that the exhibit was valuable, if well placed, and the Committee voted to recommend to the Council that the exhibit be resumed if suitable space could be worked out. It was voted that the Council recommend to the Division of Health that it resume its exhibit, also based on the availability of suitable space.

COUNTY FAIRS

County and district fairs were discussed, it being felt that again many people could be reached easily with health information through this media. It was suggested that the County Medical Societies' Woman's Auxiliaries might take the leadership in manning such exhibits and

Dr. Belden said that in localities where there is public health personnel, help could be obtained from that source. Home shows were also discussed and it was recommended that a letter go from the President of MSMA to presidents of component medical societies urging them to take advantage of these opportunities for health education to the local public.

TV, RADIO AND EDUCATION

Radio and TV presentations were discussed and it was felt that this is a local project since each locality varies in its facilities and attitude toward health education. It was felt that component societies should be encouraged to promote both spot announcements and programs available through the AMA and insurance companies. Pamphlets which are furnished by the AMA for distribution by physicians to their patients were displayed and discussed. It was recommended that a packet of this material be sent to secretaries of component societies that he might present to his membership these possibilities.

SCIENCE FAIRS

Science Fairs by students were discussed. It was reported that some county medical societies offer prizes for top exhibits. One society offered a prize for the best exhibit and the student chose a trip through the University of Missouri Medical Center. The Committee recommends that component societies sponsor these fairs to the extent of offering an appropriate financial award to Science Fair winners.

RECRUITMENT

The recruitment of medical students and Career Day programs were discussed briefly. The Committee feels that physicians should be more active in high school Career Day programs. It was reported that several physicians recently had been on such programs.

SPEAKERS

Medical speakers for lay audiences on health subjects were discussed and specific instances of such meetings were given. Members of the Committee were asked to let Mr. McIntyre have suggestions for obtaining such speakers.

John R. McDaniel, Chairman,
Roy A. Walther,
F. H. Hartwig,
J. Earl Smith,
E. A. Belden,
William T. McNew,
Chester R. Peck.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Constitution and By-Laws, W. A. Bloom, M.D., Fayette, Chairman, follows:

REPORT OF THE COMMITTEE ON CONSTITUTION AND BY-LAWS

The Committee has not met since the last session of the House of Delegates. However, the Committee is aware of the study of the make-up of Councilor Districts and delegate representation being made by a special Committee of the House of Delegates.

Therefore, the Committee wishes again to call to the attention of the delegates the following excerpts from the previous report:

"The Committee wishes to bring to the attention of the membership that any change in the number of Councilor Districts requires an amendment to the Constitution.

"Article VII of the Constitution provides that there shall be ten Councilor Districts. The Constitution also provides in Article XI that amendments to the Constitution must lay on the table for one year following presentation to the House of Delegates. In addition, publication in Missouri Medicine is required on two occasions prior to final action.

"Chapter III, Section 6, of the By-laws states that the House of Delegates shall divide the state into Councilor Districts specifying what counties each district shall include. Therefore, in order to place a county or counties into a different Councilor District only a by-law change is required. This may be acted upon at any annual session.

"Chapter III, Section 2, of the By-laws states that each county society is entitled to one delegate for each 50 full paid members. This section further provides that each hyphenated society, which is composed of two or more societies, shall be entitled to at least one delegate from each of the counties of which it is composed."

W. A. Bloom, Chairman,
H. M. Parker,
Charles E. Martin,
W. F. Francka.

The Speaker referred this report to the Reference Committee on Amendments to the Constitution and By-Laws.

The report of the Committee on Fractures, R. E. Funsch, M.D., University City, Chairman, follows:

REPORT OF THE COMMITTEE ON FRACTURES

There were two items of business presented to the Committee on Fractures:

1. It was recommended that the title of this Committee be changed from "Committee on Fractures" to "Committee on Trauma." The aims, purposes and duties of the Committee would remain the same. The title would then more appropriately describe these duties and would conform with the title used by the American College of Surgeons.

This proposition was submitted in writing to the members of the Committee. By a six to two majority, the members of the Committee approved this recommendation.

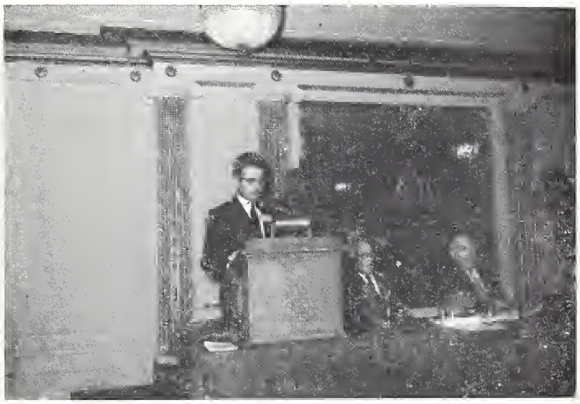
2. The Colorado State Medical Association has been instrumental in seeking federal legislation to require changes in automobile design in an effort to reduce accident mortality. According to correspondence received from the Colorado State Medical Society, this action was undertaken when the promised emphasis on further safety measures, incorporated into standard automobile design, and initially presented in the 1956 models, failed to materialize in subsequent models. Although the automobile manufacturers continued to offer certain safety equipment as "accessories," no further improvements in safety design were incorporated in subsequent models. With this in mind, H.R. 1341 was introduced having as its purpose, "to establish reasonable safety standards for passenger carrying motor vehicles acquired by the federal government. The standards would be established by the Secretary of Commerce. . . ." It

is hoped that motor car manufacturers, being forced to provide a safe car for federal government use, will adopt the same model for general distribution. If this does not ensue, further legislation will become necessary.

This bill passed the House with a defeat of a motion to recommit by a vote of 255 to 125. It comes before the Senate at the second session.

The members of the Committee on Fractures of the Missouri State Medical Association unanimously supported and endorsed this legislation.

It is therefore recommended that a letter be sent to each of the 100 Senators on letterhead stationery of the Missouri State Medical Association, endorsing H.R. 1341. Whether this letter should be signed by the Chairman of the Committee on Fractures or the Chairman of the Council has not been determined.



Vice Speaker Mixson presided during a portion of the session.

No further business or recommendations came before this Committee.

Robert E. Funsch, Chairman,
Paul W. Meyer,
Lee T. Ford,
O. P. Hampton,
Thomas G. Otto,
William C. Francis,
B. L. Murphy,
Otis E. James,
William C. Critchlow.

The Speaker referred this report to the Reference Committee on Amendments to the Constitution and By-Laws.

The report of the Committee on Eye Health, John McLeod, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON EYE HEALTH

The Committee on Eye Health did not meet during 1959 since no matters were referred to it for consideration.

State legislation of interest to ophthalmologists in 1959 consisted of: (1) a bill which was adopted, which increased the pension for the blind, the maximum being increased from $60.00 to $65.00 per month; and, (2) a bill which was defeated, which prohibited the advertising of the cost of prescriptive eyeglasses or a statement which quotes the words, "eyes examined free" or any statement which seeks to deceive the public relating to eye examination without cost.

Copies of these acts may be obtained from the state office.

John McLeod, Chairman,
H. B. Stauffer,
T. E. Sanders,
H. B. Ivy,
Paul G. Wolff,
D. H. Underwood,
Paul B. Webb,
Michael F. Pernoud,
D. E. Eggleston,
W. L. Post,
Robert S. Minton,
William B. Wilcox.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Control of Venereal Disease, Edwin M. Powell, M.D., Springfield, Chairman, follows:

REPORT OF THE COMMITTEE ON CONTROL OF VENEREAL DISEASES

The Committee on Control of Venereal Disease met in Jefferson City at the Missouri Hotel on October 28, 1959. The following were present: Drs. E. M. Powell, Springfield, Chairman; T. E. McMillan, Kansas City; E. M. Cannon, A. W. Neilson, John Byrne and Hollis Allen, St. Louis; Robert A. Bristow, St. Joseph; H. M. Hardwicke, E. A. Belden and J. P. Russell, Missouri Division of Health, Jefferson City, and Mr. Ray McIntyre, Field Secretary, Missouri State Medical Association, St. Louis.

The Committee considered a full agenda. A report of the discussions and actions taken, which were approved by the Council on December 13, is submitted as follows:

It was brought out that on the national level the proportion of the venereal disease cases involving the age group under 20 has risen alarmingly in the last three years. The specific reason for this is not known. The Committee feels that the increase in venereal disease among young people is a symptom of a larger problem and is associated with juvenile delinquency, sexual promiscuity and illegitimacy.

VENEREAL DISEASE CONTROL

After considerable discussion the Committee agreed that the responsibility for the identification of venereal disease and for its irradication rest in joint efforts of public health personnel and practicing physicians. Follow up difficulties on venereal diseases cases and their contacts pose large problems for private physicians in most cases. Public health personnel for the most part are in a strategic position to follow reported cases of venereal disease.

With this in mind the Committee studied again the new morbidity reporting system for venereal disease which was developed through a pilot study under the direction of the State Division of Health in four laboratories in St. Louis from July 1, 1956 through December 31, 1957. This reporting form, for laboratories to use, is composed of two parts, one part going back to the physician requesting the serology and the other part of the report to be sent by the laboratory to the local health department indicating that tests have been reported to specific physicians.

Dr. Hollis Allen, Chairman of the Laboratory Committee of the State Medical Association, discussed this reporting system fully from the laboratory point of view. Representatives from the State Division of Health presented their ideas as to how this reporting system could be used by public health personnel in cooperating with private physicians in handling venereal disease cases.

After considerable discussion it was agreed that some simplification of the form for the reporting system be made. The agreement also was that the reporting form be in two parts: One part to be sent by the laboratory to the referring physician giving the report of any serology tests; the other part of the form to be sent to the Division of Health by the laboratory indicating that the referring doctor had been sent reports of serology tests without naming the patient. On those reports received by the Division of Health showing positive serology test, direct contact would be made by personnel of the Division of Health with the private practitioners whose patients were involved. A discussion with the physician then would be made as to ways and means of follow up.

ACTIONS

1. The Committee requested the State Division of Health to simplify the form to be used in the reporting system as much as practical.

2. The Committee recommends to the Council of the Missouri State Medical Association that all members of county medical societies be informed of the proposed venereal disease morbidity reporting system via the new simplified form which will be available from the Division of Health as follows:

Dear Doctor:

The enclosed laboratory report on your patient indicates a reactive serology or other abnormal finding. If, after further evaluation of this patient (careful history, examination, and repeat tests) a diagnosis of a venereal disease is made, the case should be reported to your local health department on the attached morbidity report. If, after evaluation, you determine that this patient does not have a venereal disease, please so indicate on the face of the morbidity report. Be sure to indicate lab number or numbers. A pre-addressed, postage-free envelope is enclosed for your convenience in mailing the report. The result of the test(s) is being reported by laboratory number only to the local or district health department.

Lab. No. .... Name of Lab. ....

....

PHYSICIAN'S CONFIDENTIAL VENEREAL DISEASE MORBIDITY REPORT

(It is understood that under no circumstances will the health department contact this patient without the express consent of the reporting physician.)

Name or Initial .... SMW Race .. Sex
Address .... Age ......
City .... County ....
Lab No. or Numbers ...... Name of Lab. ......
Disease ....
(If syphilis, please check appropriate boxes below:)

Stage

☐ Primary or Secondary
☐ Early Latent (asymptomatic) syphilis of less than 4 years duration.
☐ Late Latent (asymptomatic) syphilis of more than 4 years duration.
☐ Late (tertiary)
☐ Congenital

Additional Pertinent Information

	Yes	No
Has patient had previous treatment?	☐	☐
Is patient now under treatment or had adequate treatment?	☐	☐
Is patient pregnant?	☐	☐

Date ...... Reported by: .... M.D.
Division of Health of Missouri Address ....
Form CD-1A (Rev. 12-59) See Reverse Side

....

LABORATORY REPORT TO LOCAL HEALTH DEPARTMENT

The following test(s) has been reported to:
Name of Physician ....
Address ....
....

Serology: Quantitative:
Kahn ....
VDRL ....
Kolmer ....
....
Other Darkfield Gc Smear Gc Culture ....
Lab No. Name of Lab. ....
Date of Test .... Address of Lab. ....

....

REQUEST FOR VISIT TO CONTACTS OF THE CASE HERE REPORTED

(List all sex contacts within ninety days preceding date of infection and all subsequent contacts.)

	Relation to patient	*Color*	*Age*	*Sex*
Name				
Address				
Name				
Address				
Name				
Address				

Please refer these persons to my office to a clinic
If penicillin or bicillin is requested for treatment of this patient, please check appropriate box:
Penicillin ☐ Bicillin ☐

SUGGESTED LETTER TO ALL MEMBERS

Dear Doctor:

The Venereal Disease Committee of the Missouri State Medical Association met recently with representatives of the Missouri Division of Health to work out plans for an improved venereal disease control program in Missouri. Dr. Hollis Allen attended this meeting, representing the Laboratory Medicine Committee.

It is recognized by all practicing physicians that syphilis and gonorrhea can be spread only by people who are infected with these two diseases. It would, therefore, seem indicated that the full resources of the venereal disease program of the Division of Health be made available to physicians to discover and bring to treatment the infectious contacts of any cases which they may see in their offices. Should it happen that the physician in attendance upon a case has the time and energy to pursue a vigorous case-finding program, then there would be no need for the epidemiologist and venereal disease workers of the Division of Health to assist him. Most physicians, however, are not in this happy circumstance and yet it is obvious that treating the victim of a contact is only discharging a portion of the physician's responsibility.

It is recognized by all practicing physicians that an accurate index of the incidence of venereal disease is necessary to the proper control of both syphilis and gonorrhea. Private laboratories are being requested to report by number only positive serologic tests. The health department will, therefore, be in possession of a proper basis for reporting the statistics of venereal disease. It will also be in a position to offer its services to those physicians who have reported such diseases. An increase or decrease in the incidence of venereal disease is of moment to all practicing physicians.

Reporting of all venereal disease cases to health departments is essential for adequate appraisal of the venereal disease problem, for effective follow-up of contacts and for program planning. A plan to improve and facilitate venereal disease reporting was discussed by our committee and is being submitted to your society for comments. Since virtually all syphilis is diagnosed by laboratory tests, it is proposed that laboratories report positive or reactive tests, by number only, to the Division of Health for appropriate follow-up activity. At the same time, the laboratory would supply the attending physician with a suitable form for reporting the case to the health department. A rough draft of a proposed form for this purpose is enclosed.

Dr. Motley presented an address.

You will note that this procedure does not violate the physician-patient relationship or the physician-laboratory relationship. At the same time, it would permit more adequate follow-up and add greatly to the validity of morbidity statistics. Such a program is particularly desirable now that private laboratories are performing a larger proportion of syphilis serologies.

Before initiating this program, the Missouri State Medical Association Committees on Venereal Disease and Laboratory Medicine would like to know whether or not it would be acceptable to Missouri physicians. We would appreciate knowing the reaction of your society.

3. The Committee recommends that the Laboratory Committee of the State Association approve this reporting system and secure the approval of the Missouri Society of Pathologists for the same.

MEDICATION AND TREATMENT OF VENEREAL DISEASE

For years the Division of Health has supplied upon request medication for the treatment of venereal disease. These medications are mailed directly to the physician who may receive payment for the treatment of his patient. Except in very unusual circumstances, the supplying of medications to physicians for the treatment of private patients or the paying of physicians for the treatment of the private patient is being discontinued by the Missouri Division of Health. The committee approves this action of the Division. The Division will furnish upon request, free drugs to doctors to treat indigent venereal disease cases. The Committee approves of this procedure.

ARTICLE FOR MISSOURI MEDICINE

The Committee feels that it is now a propitious time to publish an article in Missouri Medicine which will give the basic facts in the diagnosis and treatment of venereal disease and the reporting thereof. Dr. Neilson agreed to assume the responsibility with the assistance of Dr. Belden of the Division of Health for preparing this article and submitting it to the editor of Missouri Medicine.

Edwin M. Powell, Chairman,
T. E. McMillan,
E. M. Cannon,
A. W. Neilson,
Robert B. Bristow,
John E. Byrne.

Dr. Powell: The Missouri Society of Pathologists approved our suggestions in their meeting last night. These suggestions are in the report, and we urge that this be accepted by the House of Delegates. We feel that this will not only improve our reporting system, but possibly improve the follow-up care of these patients.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Industrial Health, Harry M. Roebber, M.D., Bonne Terre, Chairman, follows:

REPORT OF THE COMMITTEE ON INDUSTRIAL HEALTH

There having been no matters in this field brought to our attention during the last year, there has been no meeting called for the Committee. From time to time during the year, inquiries from committees of other states have reached the chairman and these have been promptly answered.

H. M. Roebber, Chairman,
S. W. Scorse,
Vencel W. Hollo,
William H. Duncan,
Douglas A. Ries,
James W. Clawson,
C. Rush McAdam.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Diabetes, H. E. Oppenheimer, M.D., Clayton, Chairman, follows:

REPORT OF THE COMMITTEE ON DIABETES

Organizational.—There are two diabetes societies in Missouri, each with a professional and a lay component. These are the St. Louis Diabetes Association and the Kansas City Diabetes Association. Both were extremely active in all the fields of endeavor which are supported by the parent American Diabetes Association:

1. Professional education
2. Diabetes Detection Drives
3. Summer camps for diabetic children
4. Lay education.

In addition, the organization of the new Missouri State Diabetes Association has progressed rapidly in the last year and it has become incorporated. This group at present consists only of physicians, approximately 40 in number.

Professional Education.—Kansas City: The Committee on Diabetes and the Missouri State Diabetes Association sponsored a combined dinner meeting during the 1959 annual meeting of the Missouri State Medical Association at which time the following papers were presented: "Non-Atheromatous Lesions of the Blood Vessels in the Diabetic Person," Herman T. Blumenthal, M.D., St. Louis, and "Fluids and Electrolytes in Diabetic Acidosis," Harry Statland, M.D., Kansas City.

Lake of the Ozarks: The Missouri State Diabetes Association sponsored a fall meeting in September 1959 at which several members presented papers.

St. Louis: The annual meeting of the St. Louis Clinical Diabetes Society was held in March 1959 and the following program was presented: "Experimental Vascular Disease," Robert O'Neal, M.D., and "Tolbutamide Studies in Pre-Diabetes," Harry Barreto, M.D.

The fall meeting of the St. Louis Clinical Diabetes Society sponsored Kelly M. West in September 1959. His paper was entitled "The Comparative Pharmacology and Clinical Effects of Five Sulfonylurea Derivatives."

Dr. Joseph Beardwood, Philadelphia, participated in the Central Society of Industrial Surgery in December 1959. Dr. Beardwood, who was invited by the St. Louis Clinical Diabetes Society, spoke on "The Employment of Diabetics" and later he led a panel discussion on "Diabetes in Industry." Dr. Beardwood is the chairman of the American Diabetes Association Committee on Employment. He was introduced by William H. Olmsted, M.D., the Executive Director of the St. Louis Diabetes Association.

Diabetes Detection Drives.—Kansas City, Springfield and St. Louis all held successful annual detection campaigns in November 1959. Many counties in Missouri also participated in detection campaigns.

The American Diabetes Association endeavors to "reach" every county medical society with its annual detection program. Each year there are a greater number of Missouri's counties participating.

Summer Camps.—Lion's Den, sponsored by the St. Louis Diabetes Association, and Swope Park, sponsored by the Kansas City Diabetes Association, were again in operation, and reported successful camps.

Lay Education.—Dr. Kelly M. West spoke to the St. Louis Diabetes Association members in September 1959. Dr. West's paper was entitled "Pills for Diabetes." Deaconess Maude Behrmann, the national authority on the meal planning system of diabetic diets, spoke to the same group in November 1959. Her topic was "Every Meal a Feast." The St. Louis Diabetes Association also sponsored its annual dinner for diabetics in May 1959. This was attended again by a "full house," taxing the facilities of the large cafeteria of the O'Fallon Technical High School in St. Louis. The St. Louis Dietetic Association were cosponsors. Its dieticians served the food and after the dinner presented an instructional program to the diabetics and their spouses.

Scientific sessions were well attended.

Grants.—Each of the three medical schools in Missouri have continuation grants from the Arthritis and Metabolism Section of the National Institute of Health, of the U.S.P.H.S. The St. Louis Clinical Diabetes Society has a grant from the American Diabetes Association to evaluate glucose oxidase for diabetes detection (screening) purposes.

Coming Events.—The Missouri State Diabetes Association has made application to the American Diabetes Association for its approval as an affiliate of that national body. This will probably be acted upon late in January 1960.

Franklin B. Peck, M.D., First Vice-President of the American Diabetes Association and director of International Research for the Eli Lilly Company, will be the speaker sponsored by the Committee on Diabetes and the Missouri Diabetes Association at the Annual Meeting of the Missouri State Medical Association in March 1960. He will speak on "Newer Aspects of Diabetes." That evening Dr. Peck will speak again to a dinner meeting of the combined diabetic groups.

The Future.—It is envisioned by the Chairman of this Committee that the Missouri State Diabetes Association will fill a need in the education of the physician, and subsequently his patients, throughout the State. Nationally an organization exists, The American Diabetes Association, and the two large cities in the State, Kansas City and St. Louis, have local organizations. In Missouri, a Committee on Diabetes was formed in an effort to fill the gap between these two. It is a fine thing but can not be effective enough. Therefore, the Missouri State Diabetes Association has been organized and it is hoped that it will be a means toward developing a service in all phases of diabetes to the physicians of Missouri.

Henry E. Oppenheimer, Chairman,
Lucien W. Ide,
J. Bruce Lemmon,
H. M. Gilkey,
Charles M. Lamke,
William H. Olmsted,
Robert E. Koch,
Ralph W. Casford,
J. H. Walterscheid.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Anesthesiology, Russell D. Shelden, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON ANESTHESIOLOGY

There have been no formal meetings of this Committee during the year. However, the majority of practicing anesthesiologists in the state have participated in the two meetings of the Missouri Society of Anesthesiologists and more frequent meetings in their local areas.

Six approved residency programs are now functioning in the state. There are other postgraduate training facilities available for those physicians interested in such training. All physicians who include anesthesia in their practice are invited to join the state society and are urged to further their knowledge and improve patient care.

Russell D. Shelden, Chairman,
Edward O. Kraft,
Otto T. Blanke,
Walter W. Tillman,
Carl K. Ness.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Hospital and Professional Relations, Hollis N. Allen, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON HOSPITAL AND PROFESSIONAL RELATIONS

The Committee on Hospital and Professional Relations considered two matters dealing with the hospital licensing law which were referred to it by the Council. These two matters were hospital licensing and Callaway County Hospital inspection by the Division of Health.

In addition, the Committee brought to the attention of the Council an educational project of the Missouri and Iowa Hospital Associations, entitled "In Quest of Health."

The report of the Committee was submitted to the Council at its meeting December 13, 1959. The Council accepted the report as follows:

HOSPITAL LICENSING

Dr. H. M. Hardwicke, Acting Director, State Division of Health, wrote Dr. Ralph Perry, July 9, 1959, relative to some problems of the State Division of Health. The above listed item was referred to this Committee. The part of Dr. Hardwicke's letter which refers to this subject is Exhibit A. Exhibit B and C relate to this matter.

The Committee recommends the suggestions contained in Dr. Hardwicke's letter be approved. These are shown in the second and third paragraphs of Exhibit A.

The Committee suggests that the State Licensing authority advise the hospitals of these rulings and that the Chiefs of Staff in each instance be informed.

Exhibit A.—Re: Hospital Licensing.—You are aware that the Division of Health is charged with the licensure of all operating hospitals in the State of Missouri with the exception of those operated by agencies of government. The regulations and codes for the licensure of hospitals were for the most part written by members of the Missouri State Medical Association and by practicing hospital administrators. The majority of the community hospitals are now licensed.

The hospital is the doctor's workshop. The quality of medical care rendered in the hospital is the responsibility of the physicians practicing in the hospital. It is our suggestion, therefore, that we in the Division of Health do not attempt to evaluate patient care within those hospitals which are inspected by the Joint Board for Accreditation. Since the hospital licensing law is specific concerning fire safety and sanitation, we will continue to evaluate all hospitals in these two areas.

We will continue to evaluate hospitals not inspected by the Joint Board for Accreditation in accordance with the regulations and codes. Those which are deficient in fire safety and sanitation will be turned over to local authorities for action. Those which are deficient in patient care and not evaluated by the Joint Board but in compliance with regulations and codes for safety and sanitation will be free from any action by the Division of Health. The local medical society in the area in which the hospital is located and the physicians practicing within the hospital will receive copies of our reports on patient care deficiencies.

It would seem that this procedure might remove from the Division of Health much of the criticism leveled at it by practicing physicians during the past few years. The Division of Health will retain its responsibility for the safety of the public as well as its responsibility for the protection of the public against preventable illness. The Division of Health will return to the practicing physician the full responsibility for the quality of care rendered their patients. We will continue to offer practicing physicians services in the areas of epidemiology and infection control should these services be requested.

Exhibit B.—Reply from Dr. Allen to Dr. Hardwicke.—The procedures set forth in your letter concerning hospitals meets with my approval and I believe will meet with the approval of most of the doctors in the state. Although the rules set up for patient care may have been set up by doctors, it could cause considerable difficulties if inspection along these lines were carried out by anybody outside of the medical profession itself. The doctors of the state have long insisted that patient care is entirely in their province. They have not necessarily always fulfilled their responsibilities but I believe the responsibility should be thrown back completely on their shoulders.

As you state, the evaluation of the hospitals as far as sanitation and fire safety are concerned, belongs in the category of the Department of Health and I can see nothing wrong with your suggested plan of operation. As an aside on this subject, I have heard some criticism which is very hard to evaluate concerning inspections. It would seem, on certain occasions, a hospital would be inspected and certain requirements made. On another inspection, when they believe all of the requirements would be met, another inspector would find other objections. As I say, such criticism is hard to evaluate, but I do know that such a thing happens when the inspector for an accreditation of hospitals comes around and as this criticism has been made from several different places, it is possible that unknowingly, it may have happened in your department. It would, of course, make one quite perturbed to meet the specifications of one inspection and then find that the interpretation at another inspection might be different. This is purely an aside to the main problem, but I thought you would like to have the criticisms as I have heard them, reported to you.

Exhibit C.—Reply from Dr. Hardwicke re: Hospital Licensing.—Your comments regarding the hospital licensing program are very interesting. We, too, have heard conflicting reports particularly in relation to fire safety inspection. I think these criticisms are well founded. Basically it is not the business of the Division of Health to establish and maintain fire safety. This is a profession in its own right. We have tried for several years to get the Legislature to establish a fire marshal's office in the state. Such efforts have been opposed successfully by very powerful groups. It is understandable that relatively untrained individuals in the field of fire safety would render conflicting reports. We are attempting to straighten this matter out.

Delegates were attentive.

Callaway County Hospital Inspection by Division of Health

This hospital was inspected recently by the State Licensing Authority. Exhibit D is copy of letter to Mr. Neil Wortley, State Division of Health. Exhibit E gives his reply.

A copy of his reply was furnished to Dr. Stuart, who wrote as follows:

"This will acknowledge your letter of October 23, relative to correspondence on the Callaway County Memorial Hospital. I received a letter from Dr. John J. Brown, Chief of Staff of Callaway County Hospital, today and he tells me that a copy of the letter from Mr. Wortley of the Division of Health to you was read at the Staff meeting last night and that Callaway County Memorial Hospital Staff was unanimously pleased with Mr. Wortley's interpretation of the records. We wish to thank you for your efforts on our behalf."

We have been advised since that time that the Callaway County Hospital has received its license.

This Committee believes that the matter has been concluded to the satisfaction of all concerned.

Exhibit D.—*Dr. Allen's letter to Mr. Neil C. Wortley.*—A copy of the Hospital Licensing report, from the Division of Health to Callaway Memorial Hospital, 828 Jefferson Street, Fulton, Missouri, has been turned over to me by the Council of the Missouri State Medical Association, in my capacity as Chairman of the Hospital and Professional Relations Committee.

It seems that the staff objects to this report, particularly the last part of the second paragraph under (a) concerning a statement made that "Minutes of these discussions should be concisely recorded to include a brief clinical abstract of the various cases presented and of pertinent discussions relating to selected deaths, unimproved cases, complications, infections, etc., of patients in the hospital at the time as well as those recently discharged."

I can find nothing in the Missouri Hospital Licensing Law, regulations and codes, that could conceivably demand such records of a hospital. If records like these were kept in detail as requested, they would open large numbers of cases in a hospital to unjustified medical legal suits, and I know of no hospital where details of these discussions are kept.

Before this is taken up with my committee, I would like your reaction concerning this entire program in terms of the regulations and codes as set up by the Division of Health.

The only code that I could find that it might come under is No. 8 on page 88, and there is nothing here concerning the keeping of minutes of such discussions. A simple statement in the minutes that the cases were analyzed would, in my opinion, satisfy the code and probably should be all that is found on any permanent record.

I would be pleased to have your comments or those of Dr. Russell concerning this report.

Exhibit E.—*Reply from Mr. Wortley to Dr. Allen.*—This will acknowledge your letter of October 2, 1959, relative to recommendations included in a licensing survey report to Callaway Memorial Hospital in Fulton, Missouri.

The basis of the entire comment made under 2a of the above report was that of Regulation No. 1 on pages 87 and 88 of the Regulations and Codes. As you know, this regulation is concerned with the professional staff of the hospital and briefly outlines the duties, responsibilities and functions to be carried out by the staff as an organized, self-governed entity within the hospital family. From our interpretation of the various Codes, we endeavor to obtain compliance only within the framework of recognized standards as established and adopted by members of your profession. On occasion, we may also call attention to deficiencies found to exist with respect to the staff by-laws, rules and regulations which have been established and adopted by the particular hospital staff and approved by the governing body of that hospital.

Typical of the disadvantages faced in attempting to determine compliance in such areas on the basis of only periodic surveys or inspections, considerable emphasis must, of necessity, be placed upon the records and other written evidence available at the time. This then is the primary purpose in reviewing this material and the reason we ask that it be kept in sufficient detail to provide such evidence of compliance.

In this respect, we might also point out that from our own hospital experience and from occasional reviews of survey reports sent out by the Joint Commission on Accreditation of Hospitals we find that the same or similar terminology is generally used, although the "Standards for Hospital Accreditation" merely states that "Adequate minutes of all meetings shall be kept."

Before going further, let me assure you, Doctor Allen, that we are acutely aware of the physician's somewhat hazardous position with regard to malpractice liability and that we in no way wish to further jeopardize this position. In this respect, our personnel have, on a number of occasions, called attention to the fact that tissue committee worksheets, minutes of committee and of the staff meetings should never leave the identity of patients open through the use of names, medical record admission numbers, etc. From this, it may be seen that it is not our interpretation of the Codes that such identity be made or recorded although the terminology used in reporting apparently gave rise to the misunderstanding that it was required.

Similar terminology has been used in a number of reports sent to hospitals in the past. In an effort to avoid such misunderstanding in the future, we suggest the use of modified terminology whereby the recommendation would read, in effect, "The minutes of medical staff meetings should be so recorded as to reveal a thorough review and analysis of the clinical work being done in the hospital."

We certainly appreciate your calling this matter to our attention, and wish you and your committee to know that our only intent in administering this program is to promote a constantly improving quality of care for hospitalized patients in Missouri.

By the direction of J. P. Russell, M.D., Director, Section of Hospital and General Services.

"In Quest of Health"—An Educational Project of the Iowa Hospital Association

One of the members of the Committee forwarded a copy of a bulletin to me relative to this subject. We asked Mr. O'Brien to obtain copies of the material from Iowa. A copy of the material was sent to us on a loan basis for two weeks.

We are attempting to learn something about the endorsements in Missouri and the distribution. We shall report to you later. In the meantime, one copy is available for your inspection.

Hollis N. Allen, Chairman,
Victor B. Buhler,
W. S. Sewell,
Stanley S. Peterson,
Carl F. Vohs,
W. F. Francka,
Ralph Perry.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on Laboratory Medicine, Hollis N. Allen, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON LABORATORY MEDICINE

The Committee on Laboratory Medicine considered two problems during the last year. They were "Routine Serologies by Laboratories of the State Division of Health" and "Advertising by Laboratories."

The report of the Committee was submitted to the Council of the Association at its meeting December 13, 1959. The Council approved the report which follows:

Routine Serologies by Laboratories of State Division of Health

Dr. H. M. Hardwicke, Acting Director, State Division of Health, wrote to Dr. Ralph Perry, July 9, 1959, relative to some problems of the State Division of Health. The above listed item was referred to this Committee. The part of Dr. Hardwicke's letter which relates to the subject matter is Exhibit A. Exhibit B shows copy of letter to Dr. Hardwicke and Exhibit C is copy of his reply.

In view of the reply shown in Exhibit C, especially, "Perhaps it would just be best for the Division of Health to continue to do those serologies which in its opinion would not be done in any other laboratory. In this fashion we could continue to decrease the number of serologies done by us," the Committee recommends that no further action be taken at this time. In addition, the Committee wishes to reaffirm its willingness to provide laboratory services without cost or at a reduced cost whenever the referring physician will advise the private laboratory of such financial circumstances of a particular patient.

Exhibit A.—Proposal from the Division of Health re: Laboratory Services.—When public health laboratories were first established in Missouri, there existed an inadequate number of private laboratories to service practicing physicians. Public health laboratories have continued to do routine procedures for practicing physicians. Many of these procedures are now available to physicians from private laboratories.

The public health laboratory program in keeping with all other programs of the Division of Health took a cut in appropriations. If public health laboratories are to continue to assume responsibility for purely public activity such as water, sewage, milk, food, it will be impossible for them to assume responsibility for routine procedures submitted by private physicians. The law requires that public health laboratories *do prenatal* and premarital serologies when these are submitted to them by physicians. This we will continue to do. We will also continue to do those procedures which are not now available in private laboratories. Such procedures would include virus studies, finite identification of enteric organisms, mycology studies, and if possible, phage typing.

It is our suggestion that the public health laboratories discontinue all routine serologies submitted by private physicians. The only exception to this would be *prenatal* and premarital serologies, and routine serologies submitted by those physicians whose *names have been approved by the Council of the Missouri State Medical Association.* We in the Division of Health feel quite strongly that agencies of government should not use tax money in competition to private enterprise unless the law specifically requires us to do so or unless the health of the public is menaced.

Exhibit B.—Dr. Allen's Letter to Dr. Hardwicke re: Laboratory Services.—Your suggested procedure in laboratory procedures was accepted by the Council of the Missouri State Medical Association, and made in a report to the House of Delegates at their last meeting. This report was accepted by the House of Delegates. There is one difference between the statements made in your letter to Dr. Perry and those principles that were accepted by the Council and the House of Delegates. In the third paragraph of your letter on Laboratory Services, you have under-lined the following:

"routine serologies submitted by those physicians

whose names have been approved by the Council of the Missouri State Medical Association."

I would like a clarification of what this means. I do not believe the Council would approve this part of the recommendation. It would necessitate them investigating the necessity of certain physicians submitting routine tests to the State Health Laboratories. I can see no reason why any one physician, anywhere in the State, could be singled out by the Council as having privileges that other physicians do not have. I would like to know your philosophy for such reasoning, because as far as I know, this idea has never been brought up to the Council or the Committee on Laboratory Medicine. Aside from that, it would seem that your suggestions have been accepted both by the Council and by the House of Delegates.

Exhibit C.—Reply from Dr. Hardwicke re: Laboratory Services.—Your comments on Laboratory services is interesting. I am aware that the House of Delegates approved the secession of laboratory procedures for private practitioners of medicine by the Division of Health. I am also equally aware that almost without exception every local medical society in the state has condemned the Division of Health for ceasing to do serologies. It appears that there are areas within the state in which physicians are practicing which are of such a low economic level that it is impossible for patients to pay for routine laboratory procedures. A possible solution to this dilemma might be found in having the Council officially recognize such areas and officially request the Division of Health to offer physicians in these areas the services of the public health laboratories. I recognize that such a procedure would be of a stop-gap nature. Perhaps it would just be best for the Division of Health to continue to do those serologies which in its opinion would not be done in any other laboratory. In this fashion we could continue to decrease the number of serologies done by us.

We in the Division of Health recognize and appreciate the support which the Council and particularly the Laboratory Committee have given us. We also realize that apparently there exists a difference of opinion between local medical societies and the Council. Such differences of opinion might make it difficult for our district health officers to work closely and in harmony with local practicing physicians. I do not believe that there is a need for a special meeting of either of your committees.

ADVERTISING BY LABORATORIES

The question of advertising by private laboratories in medical publications has been raised. In general, the American College of Pathology has followed the practice of not permitting advertising by laboratories in any medical publications unless the rules of the individual medical society may permit advertising by any and all members of the society.

The A.M.A. has repeatedly stated that laboratory medicine is a part of the over-all practice of medicine just as much as surgery, medicine or any other phase; and that laboratories, whether they are under the supervision of doctors of medicine or others should follow the same rules in advertising as apply to all other physicians.

Therefore, in order that a uniform policy be established, the Committee recommends that the Association follow the A.M.A. Code of Ethics relative to advertising; and that component county medical societies, which have publications, be advised that advertising by laboratories not be accepted unless advertising by all other county society members, listing specialties, is permitted.

Hollis N. Allen, Chairman,
Joseph E. Flynn,
Victor B. Buhler,
Angelo Lapi,
Fred C. Coller.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Physical Medicine and Rehabilitation, D. Elliott O'Reilly, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON PHYSICAL MEDICINE AND REHABILITATION

There were no matters referred to the Committee by the Council during 1959.

The Chairman corresponded with similar committees in other states. The Chairman testified before a committee of the legislature regarding S.B. 24. This legislation, which was defeated in committee, provided for a change in the definition of chiropractic. The new definition proposed to extend the physical therapy aspects of chiropractors.

D. Elliott O'Reilly, Chairman,
F. D. Sundstrom,
William J. Stewart,
F. O. Tietjen,
John W. Cashman,
Otakar Machek.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Civil Defense, Carl D. Siegel, M.D., Sedalia, Chairman, follows:

REPORT OF THE COMMITTEE ON CIVIL DEFENSE

The Committee on Civil Defense has not held a meeting since the last annual meeting of the Missouri State Medical Association. Members of the Committee have cooperated with the personnel of the State Board of Health in devising an over-all medical annex to the State Disaster plan.

Several members attended national and regional meetings, pertaining to the Civil Defense Emergency program, and the A.M.A. County Medical Conference on Civil Defense.

It is believed that too much is being expected of individual practicing physicians in organizing plans for a disaster that may never happen to gain enthusiastic cooperation of the profession as a whole.

This belief is not universal with the committee as evidenced by activities of its members.

Carl D. Siegel, Chairman,
M. P. Leech,
H. D. Steinbeck,
Carroll P. Hungate,
John R. Forgrave,
J. M. Canella,
Curtis H. Lohr,
R. Ned White,
George E. Thoma,
George L. Watkins,
John A. Griffith.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Tuberculosis, Florence E. MacInnis, M.D., Kansas City, Chairman, follows:

REPORT OF THE COMMITTEE ON TUBERCULOSIS

Members of the Tuberculosis Committee of Missouri met with Dr. H. M. Hardwicke, Dr. Charles A. Brasher, Superintendent and Medical Director of Missouri State Sanatorium and Acting Director of Tuberculosis Control, and other members of the staff of the State Division of Health, and Donald E. Pratt, Executive Director of the Missouri Tuberculosis Committee, on April 26, 1959, at the Missouri Hotel in Jefferson City. The purpose of this meeting was to help in the planning of a continuing program for the eradication of tuberculosis in Missouri, with emphasis on the use of the tuberculin test. It was agreed at this meeting that the three groups present would cooperate in the educational program and in the planning of tuberculin testing projects throughout the state. The materials for local tuberculin testing would be furnished by the Division of Health of Missouri, through doctors and not directly to nonmedical groups.

Because of the geographic location and the interest of the Ozark Medical Society in the prevention of tuberculosis, Newton County was chosen tentatively as a pilot area for a tuberculin testing program.

Dr. H. M. Hardwicke, Dr. Charles A. Brasher, and the Chairman of the Tuberculosis Committee reported to the Council on the proposed Newton County Tuberculin Testing Program. This report was published on page 940 in Missouri Medicine, August 1959.

Members of the Tuberculosis Committee reviewed "A Guide to Tuberculin Testing" and sent in to the State Division of Health suggestions to improve and bring this material up to date.

In Missouri Medicine during the months of October and November the Tuberculosis Committee reported directly to the physicians of this state on "A Continuing Plan for Eradication of Tuberculosis in Missouri." The method of procedure to be used in Newton County was described. Further reports on this project were promised when the study is in progress.

Members of the Tuberculosis Committee cooperated in the planning and also in the presentation given by the Panel on Tuberculosis at the Missouri State Medical Association Annual Meeting on April 8, 1959, under the auspices of the Missouri Trudeau Society.

Florence E. MacInnis, Chairman,
Paul Murphy,
H. M. Roberts,
Joseph L. Lucido,
Walter C. Gray,
David N. Kerr,
Glenn O. Turner,
Carl G. Popp.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Study of Cardiac Disease, Earl L. Loyd, M.D., Jefferson City, Chairman, follows:

REPORT OF THE COMMITTEE ON THE STUDY OF CARDIAC DISEASE

There has been no formal meeting of the Committee during the last year. However, the Committee is pleased to bring to your attention the results of the rheumatic fever survey conducted during 1959 through the physicians of the State of Missouri. The purpose of this survey is to: (1) determine the amount of rheumatic fever in the state, (2) alert the doctors of Missouri that rheumatic fever is still a serious problem, (3) secure helpful information regarding incidence of the disease, and make available information of facilities for aid to patients. The results of this survey are published in the March 1960 issue of Missouri Medicine.

The Woman's Auxiliary had a luncheon meeting.

The Committee recommends that this article be brought to the attention of all county medical societies with the idea that it contains material for scientific program discussions as well as helpful information to the individual physician concerned with the rheumatic fever problem.

The survey was carried out by the rheumatic fever and congenital heart disease committee of the Missouri Heart Association with cooperation from this Committee.

Earl L. Loyd, Chairman,
E. J. McIntire,
A. M. Estes,
W. J. Gillespie,
C. A. Potter,
E. E. Glenn,
Stanley F. Morest,
F. L. Biggs,
E. Lee Shrader,
William I. Park.

The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The report of the Committee on Rural Medical Service, A. E. Spelman, M. D., Smithville, Chairman, follows:

REPORT OF THE COMMITTEE ON RURAL MEDICAL SERVICE

The Physicians' Placement Service, maintained in the headquarters office of the State Association, maintains an up-to-date file of communities seeking additional physicians, and of physicians seeking locations. At present some 58 localities are listed as suggested openings for additional doctors. Most of these listings are outside of the metropolitan areas of the state.

Physicians seeking locations are constantly contacting the Placement Bureau by letter, telephone or personal visitation, for information on suitable locations. The Field Secretary of the Association, in his travels over the state, has collected much valuable information on areas requesting physicians which is added to the placement file and brought to the attention of these physicians. In numerous instances the names and addresses, with biographical information, of doctors seeking locations, are sent to responsible contacts in areas seeking additional medical manpower.

It is contemplated that in the near future a practical and effective plan for a unified effort between the Placement Bureau and the University of Missouri Medical Center will be developed to enhance the placement of graduates of the University Medical School over the state. The Committee hopes that the preceptorship program will aid in influencing the M.U. graduates to locate in various outstate Missouri towns. The program has not been in operation long enough as yet to draw any specific conclusions. However, reports from both preceptors and preceptees, as to their evaluations of the program, are most promising.

A symposium on "Accidents in Children" was presented.

A joint meeting of this Committee with the State Association Committee on Medical Education and Hospitals was held, Sunday, January 17, at the Missouri Hotel in Jefferson City. Unfortunately, due to inclement weather only half of the Committee members were able to be present. At this joint session, Dr. Vernon Wilson, Dean, University of Missouri Medical School, was a special guest. The main purpose of this joint meeting was to discuss with Dr. Wilson ways and means through which the two Committees can work effectively with the Medical School for the mutual advantage of the school, the Missouri State Medical Association and the people of the State of Missouri.

A résumé of this January 17 joint session will appear in the report of the Committee on Medical Education and Hospitals and will not be duplicated here.

The Chairman of the Committee was privileged to represent the Committee on the program of the 33rd annual meeting of the Missouri Public Health Association, May 18-20, 1959, at the Statler Hotel, St. Louis. The Chairman is presently serving as a member of the State Hospital Advisory Council. This Council must approve all federal grants-in-aid under the Hill-Burton Act in Missouri for hospital and health facility construction. The Council also serves in an advisory capacity to the Missouri Division of Health in administering the state hospital licensing law.

The Committee is well aware of problems relating to rural medical services in this state and is constantly attempting, through various means, to aid in their solutions.

A. E. Spelman, Chairman,
William J. Shaw,
B. J. Bass,
John F. Pearl,
Charles H. Lewellen,
C. A. McBurney,
Jack Mullen,
A. J. C. McCallum.

The Speaker referred this report to the Reference Committee on Reports of Officers.

The report of the Committee on Aging, Stanley S. Peterson, M.D., Springfield, Chairman, follows:

REPORT OF THE COMMITTEE ON AGING

The Committee is aware of the magnitude of the job ahead in the consideration of many problems of the aged which directly concern the medical profession. Some of these problems claimed the attention of the Committee at its meeting October 29, 1959, at the Missouri Hotel, Jefferson City. Those in attendance were: Drs. Stanley S. Peterson, Chairman, Springfield; C. Thorpe Ray, Columbia; J. P. Russell, Missouri Division of Health, Jefferson City; Mr. Ray McIntyre and Mr. Jordan Singleton, State Association staff, St. Louis.

Though a quorum was not present at the meeting it was decided to proceed with the items on the agenda and to send by mail the minutes of the meeting to the absent members for their approval.

Following Committee members' approval by mail the Chairman presented the Committee's deliberations to the Council of the Missouri State Medical Association on Sunday, December 13. The report was approved by the Council as follows:

QUALITY OF MEDICAL CARE IN NURSING HOMES

At the request of Dr. Hardwicke, Acting Director of the Missouri State Division of Health, the Committee discussed the question of the quality of medical care in nursing homes under the Nursing Home Licensing Law.

At the outset, the Committee discussed and questioned the rigidity of some of the regulations promulgated in connection with the nursing home law—for example, the regulation that requires that each nursing home patient must be visited by a physician once each month. The Committee pointed out that a monthly visit may or may not be necessary to provide good medical care depending upon the individual case involved. Agreeing that perhaps some standard must be set up for rating purposes, the Committee believes that the attending physician in the final analysis must be the judge of the kind and quantity of care required, and that this cannot be set by a rigid calendar criterion. The Committee believes that the regulations applied to nursing home licensing should be reviewed to determine if they are realistic and practical as they pertain to good medical care—and not only for convenience in administration.

In any case, the Committee believes that the relationship between the attending physician and the patient, or the nursing home operator as an agent of the patient, is a private relationship.

If there are deficiencies on the part of the physician or nursing home operator in following state regulations or in the keeping of records, the Committee believes these should first be called to the attention of the operator who holds the nursing home license. It is then up to the operator to work out the difficulty with the physician. If such deficiencies are not corrected, the Division of Health then has recourse against the operator through the nursing home law.

As the Committee sees it, it is the nursing home that is affected in the enforcement of the regulations, and thus the situation should be handled through the operator and not directly with the physician. There would seem to be no state board which would have responsibility directly with a physician in relation to compliance with nursing home regulations. Certainly a report to the Board of Registration for the Healing Arts would not be in order since such matters are outside its purview.

Finally, in any question about the nursing home law or regulations, the Committee feels that they cannot in any way recommend that the Division of Health relinquish or avoid any responsibilities which are charged to it under the law.

REGISTRY OF NURSING PERSONNEL

Dr. Hardwicke has mentioned that one of the responsibilities of the public health nurses is the organization of community services for the chronically ill, debilitated and the aged. He suggests that public health nurses be charged with the development of nurse registries in the various communities over the state.

The Committee commends this idea, which it believes will fill a definite need in many communities in Missouri. Any help that can be rendered in making additional nursing services available is desirable, and if the public health nurse can aid in this, the Committee believes it would be very worthwhile.

In these activities, however, the Committee feels that the Division of Health should consult and coordinate its plans with the state nurses' association and other nurses' organizations. Further, we feel that it is important that care be taken not to upset or disturb any present arrangements for nurses registries now in operation. The Division of Health should recognize and work through existing organizations where these are operating.

It would be useful, also, the Committee feels, to designate in any registry the type of personnel listed as Registered Nurse, Licensed Practical Nurse, etc.

INFORMATION ABOUT PUBLIC HEALTH NURSES

In discussing this subject, the Committee agreed that it would be valuable to both the Division of Health and the practicing physician if more information were disseminated to physicians about the duties, capabilities, limitations and work of the public health nurses in the state. Realizing that the Division of Health is doing some work along this line, the Committee believes that these informational efforts should be continued and extended. The Committee recommends that space in MISSOURI MEDICINE which is available to the Division of Health be used for this purpose.

HOMEMAKER SERVICES

Dr. Hardwicke has also suggested that the public health nurse is charged with the responsibility of developing community services—homemaking services and personal services—for the chronically ill, etc.

The Committee agrees that the attending physician is concerned with the welfare of the patient and the family, including the possible need for housekeeping and personal services beyond health or medical care. It agrees that the physician should be informed of the availability of such services so that he may advise the patient when necessary. Certainly if there is any type of medical care involved, this should be given under the direction of the physician, and good communication should be maintained between the nurse, the person rendering homemaking service and the physician.

The Committee had some question, however, about the place of such homemaking services under the Division of Health. In some areas of the state such services are now being rendered by voluntary agencies, and it is the impression of the Committee that these are looked upon more as social and welfare services than as health services.

DR. RUSSELL

Dr. Russell brought to the attention of the Committee Dr. Hardwicke's request for the appointment of a member of the MSMA Committee on Aging to Task Force No. 4—Health and Medical Care—of the Missouri Committee for the 1961 White House Conference on Aging. The Committee will report this request to the president of the Association for action.

Dr. Russell also mentioned Dr. Hardwicke's question as to whether the MSMA Committee on Aging plans to develop a program on the practicing physician's approach to the care of the aging which might be used in a report on activities of other agencies in Missouri dealing with aging. The Committee agreed to forward such programs to the Division of Health as they are developed.

DEVELOPMENT OF STATE PROGRAM FOR PHYSICIANS IN RELATION TO PROBLEMS OF AGING

The Committee discussed development of programs for aging, particularly in relation to the resolution on the Vendor program passed by the House of Delegates in 1958 and the resolutions on free choice of physician and panel plans passed by the House in 1959. The Committee interprets the policy of the House as providing that physicians should furnish medical care for the people on a fee-for-service basis, with patients being responsible for payment through their own funds, insurance, panel programs or other such sources. Patients unable to pay through these means should be treated by physicians on the traditional basis of reduced or no fees. The Committee believes that Association policy points out that there is no need for recourse to government aid or payment of physicians' fees through government programs for the indigent.

The Committee also feels that medical care financing is no different from the financing of other necessities and that there is no reason for people to be treated differently on the basis of age alone. In the Committee's opinion, simply because a person reaches a certain age is no reason that fees for medical care should be reduced for him, or the ways of financing his care should be different than for others.

SUGGESTION FOR A STATE PROGRAM

It was the Committee's feeling that the Missouri State Medical Association should not develop any program for the aging in isolation. Instead, its program should be to integrate the efforts of physicians into projects being carried on by other organizations—to encourage physicians to give aid, guidance and active interest to community activities in this field.

Using the six points recommended by the American Medical Association for community programs, the state association and Committee on Aging should encourage and assist local medical societies to carry on active programs at the local level.

The Committee recommends that the Council request each local society in the state to set up a Committee on Aging with an active and energetic chairman. These local committees would then be charged with development of a local action program with the state committee's assistance. This program would then be presented to the entire local society to enlist every member in active implementation.

The Auxiliary had doctors of St. Louis County Medical Society as actors in the Sunday evening entertainment.

The elements of such a local program might include:

1. A program of dissemination of information on aging to the public.
2. Active guidance by physicians to all community organizations which have projects dealing with aging to provide proper medical orientation.
3. A positive public relations and publicity program to inform the public as to what is being done by the medical profession to help solve the medical and social problems of aging.

It is emphasized that the Committee is thinking of such a program as a continuing program, to be carried on for many years to come. It should be one of the most important projects in the activities of each local society.

COMMUNITY RESOURCES FOR THE AGING

Discussion brought out that members of the Committee felt that the full resources and facilities for the aging in the various communities and the state are not fully known or being sought out and utilized, either by the profession or by the people.

Many facilities already exist which will serve the aged, if they are sought out and brought to bear on the problem. The Committee felt that this was one of the ways in which the local committees on aging could serve—by organizing to provide information, liaison, investigation of resources, and by leading efforts to fill gaps in community resources when found.

The problem of rehabilitation in older people was mentioned as another example of the activities that might be carried on by local committees. Rehabilitation, not necessarily for employment, but for personal care, should be emphasized as a means of freeing the patient's family and community from bedfast care. Interest in this can be stimulated by the local committees through informational programs to the profession and public.

FORAND BILL

In the discussion of legislation of the Forand bill type, the Committee felt that the permanent defeat of such schemes will only come as the by-product of activities of physicians in the community, demonstrating that problems are being solved without the need for such things as the Forand bill. While a frontal attack on this particular legislation may have to be mounted in the next year, the only permanent solution to the recurring introduction of such ideas is to demonstrate that the problems are being effectively taken care of without them.

To this end the Committee believes that increased interest in—and participation in civic and community activities by the physician will assure a proper direction of activity in the field of aging as well as other areas of endeavor.

Stanley S. Peterson, Chairman,
C. Thorpe Ray,
Ralph Perry,
Rolla B. Wray,
Louis H. Kohler.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Committee on American Medical Education Foundation, James P. Murphy, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON AMERICAN MEDICAL EDUCATION FOUNDATION

Because results of the previous year's AMEF campaign do not become available until after the Missouri State Medical Association Annual Session, the Committee on the American Medical Education Foundation customarily reports the final figures for the next prior year—in this case 1958.

During the 1958 AMEF campaign, 240 Missouri physicians contributed to AMEF and 1,077 contributed direct to individual medical schools. AMEF contributions totaled $8,049, of which $2,843 was raised through the work of the Woman's Auxiliary to the Missouri State Medical Association. Contributions direct to medical schools amounted to $55,476.

In turn, AMEF distributed $36,204 to the three medical schools in Missouri. Of this, earmarked funds—contributions designated by the donor for a particular school—totaled $17,604. St. Louis University received $10,177 through these contributions, Washington University received $6,050, and the University of Missouri, $1,336.

In addition, each of the three schools received a grant of $6,200 from AMEF undesignated funds.

The contrast between the $8,000 in contributions to AMEF from Missouri, and the $18,600 in undesignated funds received by Missouri medical schools from AMEF shows a deficit which, in the Committee's opinion, MSMA members should be particularly concerned with erasing.

Indications are that the 1959 campaign in Missouri will exceed the results of 1958 in both total contributors and in contributions.

The Committee returned to mail solicitation in 1959, establishing October as Missouri AMEF Month. It is hoped that the designation of this month each year for special emphasis on the needs of medical education will help coordinate local activities in behalf of AMEF and will serve to make physicians more conscious of the importance of contributing.

Another feature of this year's campaign was the suggestion that an individual physician's contribution might be based on his fees for one office call per month. The Committee felt this might be a useful guide for basic giving since it takes into account the conditions of the individual doctor's own practice.

No AMEF report can be complete without special tribute to the work done by the Woman's Auxiliary in raising funds for medical education. The Auxiliary consistently raises about one third of the total undesignated funds contributed in Missouri each year, and deserves special recognition by the Association for these efforts.

Nationally, preliminary reports indicate a successful year for AMEF. Contributions reached $1,000,000 on December 14, 1959, with approximately a month and one half remaining in the campaign. This compares with a total $1,120,000 raised in 1958. Total contributions through November, 1959, showed a 17 per cent increase over the similar period of 1958.

Again this year, Dr. James P. Murphy served as regional AMEF chairman, as well as chairman of the MSMA Committee. Missouri is in the North Central region of the national AMEF organization, along with Ohio, Indiana, Illinois, Michigan, Wisconsin and Minnesota.

The report on medical education given at the Dallas meeting of the American Medical Association, as well as a number of other reports of recent government and private studies, indicates that the rate of population growth is increasing faster than the rate at which physicians are being trained. Thus the trend in the physician-population ratio is toward a greater number of people per physician.

In addition, figures on the present reliance of medical education on government funds show that already federal and state money provides more than 45 per cent of all medical school expenditures.

Taken together, these facts indicate the increasing danger and obvious opportunity for pressure toward government influence and direction in medical education.

The alternative to this threat is substantial and increasing support of medical education by private sources. In this, the medical profession itself has the greatest responsibility. The Committee is hopeful that Missouri State Medical Association members will give even greater recognition to this responsibility in October, 1960—Missouri AMEF Month—through an increase in the size of their contributions, and even more important, through an increase in the number of contributors.

James P. Murphy, Chairman,
Hugh E. Stephenson,
Donald F. Gose,
Russell D. Shelden,
Allen I. Herman.

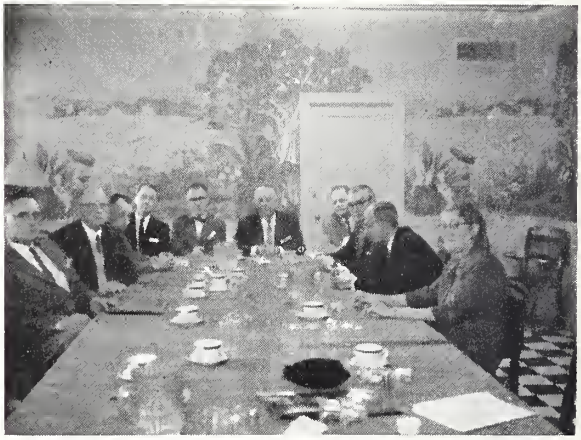
The Speaker referred this report to the Reference Committee on Medical Education and Public Welfare.

The Report of the Special Committee to Study the Councilor District Set-up and the Matter of Physician Representation in the House of Delegates, W. F. Francka, M.D., Hannibal, Chairman, follows:

REPORT OF THE COMMITTEE ON COUNCILOR DISTRICTS AND REPRESENTATION

This special committee was appointed by the President in compliance with a resolution adopted by last year's House of Delegates. The committee met twice and discussed thoroughly the matters it was its duty to consider.

One of these—the request of members of the Barton-Dade County Medical Society to be transferred from the Eighth to the Sixth Councilor District—was removed from the committee's agenda after the physicians involved withdrew their request.



The Committee on Redistricting met several times.

It was the sense of the committee that no change in the formula for physician representation in the House of Delegates should be recommended at this time.

By a majority vote, the committee approved the following recommendation to this House of Delegates:

1. That the present Fourth Councilor District be divided into two districts, one of which be designated the Eleventh Councilor District, said Eleventh District to consist of the area of St. Louis County, and that the number of councilors be increased from 10 to 11 to give the new St. Louis County District a representative of its own on the Council.

2. That the other counties in the present Fourth District—namely Jefferson, Franklin, Gasconade, Warren, Lincoln and St. Charles—be constituted a district by themselves, still to be called the Fourth District.

Those voting with the majority of the committee believe the recommendation should be adopted by the House because of the unique situation in the present Fourth District, under which St. Louis County, by reason of its numbers, is able to outvote all the physicians in all the other counties of the district put together. This, it is believed, is not a proper or democratic state of affairs. It should be corrected by taking St. Louis County out of the district and reconstituting it as a district in itself.

The members of the committee who voted against this recommendation asked that I report to the House that they did so because they did not believe an isolated, piece-meal approach was the right one to take in altering the present councilor district set-up. These committee members, however, do not wish to submit a minority report to the House.

In order to increase the number of Councilors, it is necessary to amend the Constitution of the Association.

According to the rules, a proposed amendment to the constitution must lie on the table for one year after its introduction, must be published twice in MISSOURI MEDICINE, and must receive a two thirds majority of those voting in the House of Delegates to pass.

To carry out the recommendation of the committee, then, the following resolution is presented:

Resolved, that the Constitution of the Missouri State Medical Association be amended as follows:

Amend Article VII, Section 1, page 3, of the Constitution by striking out of the fourth line of said section the word "ten" and inserting in lieu thereof the word "eleven," and further, amend Article VII, Section 2, page 3, by striking out the following sentence: "Half of the membership of the Council shall be elected each year," and by inserting in lieu thereof the following: "Councilors from the even numbered districts shall be elected every other year. Councilors from the odd numbered districts shall be elected on the alternate year."

W. F. FRANCKA, Chairman
H. E. PETERSEN,
ROBERT B. BASSETT,
JOHN F. PEARL,
J. L. WASHBURN,
ROY PEARSE,
RICHARD H. KIENE,
KENNETH GLOVER,
JAMES B. BUTTS,
W. D. ENGLISH.

The Speaker referred this report to the Reference Committee on Amendments to the Constitution and By-Laws.

The report of the Special Committee on Corporate Practice in Missouri, R. O. Muether, M.D., St. Louis, Chairman, follows:

REPORT OF THE COMMITTEE ON STUDY OF CORPORATE PRACTICE IN MISSOURI

The following report of the Special Committee on Corporate Practice has been approved by the Council, which recommends approval by the House:

The definition of corporate practice of medicine, as recommended by the House of Delegates in 1959, contains these essential elements:

1. Employment of a physician by an organization to render medical care to patients.
2. Collection of fees by the organization.
3. Use of fees for the general purposes of the organization rather than fully for the direct compensation of the physician.

It has been suggested that a study be made of corporate practice in Missouri, designed to find out the extent, patterns and trends of corporate practice in the state; the economic impact on patients, institutions and medical practitioners of such practice, and to identify particular instances of actual corporate practice now going on.

This study would be undertaken in order that, in the final analysis, the Association might determine what courses in relation to corporate practice would best serve the long-range social interest.

The suggested study would attempt to determine:

1. The number of names of institutions in Missouri in which such corporate practices are found.
2. The extent and nature of these practices, and the categories or specialties of physicians involved.
3. The number of patients being so treated, with associated information on types of illnesses, etc., which may be found pertinent, and a comparison with total numbers of patients.
4. The economic classification of patients being so treated, with particular emphasis on the influence of insurance in determining whether the patient will be so treated. This would include a determination of definitions of medical indigency, and differential treatment, if any, of various economic classifications.
5. The methods being used to gain patients for this type of practice—to attract physicians—and procedural methods of handling cases, collections and funds. This would include a determination of the amount of choice the patient has in requesting or rejecting such practice.
6. The total amounts and disposition of funds collected by the organization for such treatment.
7. A projection of the trends in the area of corporate practice.

The study would investigate, particularly, tax supported governmental institutions charging patients for services, general hospitals carrying on teaching programs, closed panel systems and other organizations potentially engaged in practices coming under the definition of corporate practice.

The categories of organizations recommended by the House as not being involved in corporate practice would not, however, fall within the scope of the study.

It is apparent that such a study would be wide in scope, requiring research in depth, personal interviews and scientific interpretation of trends and the reasons for various practices. Because of this, and because there should be no hint of bias, it is recommended that an outside research organization be engaged.

This could be either a commercial research organization experienced in social research (as opposed to statistical surveys) or a university social science group which might undertake such a study on a grant basis. Such organizations would, in consultation with the committee, develop their own methods and procedures of study.

It is recommended that the staff be authorized to investigate several such research organizations and invite their proposals for the consideration of the committee.

R. O. MUETHER, Chairman,
H. W. BENOIT,
EMMETT B. DRESCHER,
JOHN P. FERGUSON,
JOSEPH L. FISHER,
ROBERT W. KELLEY,
JOHN J. MODLIN,
RALPH PERRY,
J. H. SUMMERS.

The Speaker referred this report to the Reference Committee on Miscellaneous Affairs.

The report of the Council, J. H. Summers, M.D., Lebanon, Chairman, follows:

THE COUNCIL

Meeting of April 8, 1959

The Council met at Hotel Muehlebach, Kansas City, on April 8, 1959, immediately following the House of

Delegates. Ralph Perry, M.D., Kansas City, President, called the session to order. Those present were Drs. Perry, R. O. Muether, St. Louis; Donald M. Dowell, Chillicothe; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; B. M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; J. H. Summers, Lebanon; Ben M. Bull, Ironton; Mr. Tom R. O'Brien and Helen Penn, St. Louis.

Dr. Perry opened the Council meeting and asked for nominations for Chairman of the Council. J. H. Summers, M.D., Lebanon, was elected Chairman of the Council and took the chair.

Other officers elected were Vice Chairman, Donald M. Dowell, M.D., Chillicothe; Secretary, John I. Matthews, M.D., Jefferson City; Treasurer, Charles R. Doyle, M.D., St. Louis.

New Councilors were introduced, Paul R. Whitener, M.D., St. Louis, 4th District; O. B. Barger, M.D., Harrisonville, 6th District. J. J. Wimp, M.D., Kirksville, 2nd District, was not present.

1961 SESSION

Mr. O'Brien asked advice of the Council concerning the 1961 Annual Session. It was decided that arrangements should be made at Hotel Muehlebach for the 1961 session.

COUNCIL ON AGING

It was decided that Dr. Perry, Mr. O'Brien and the chairman of the new Committee on Aging should attend the Joint Council on Health Care of the Aged in Washington, June 12 to 14.

NEXT MEETING

It was decided that the next meeting of the Council should be held in June, on call of the Chairman, and in September, probably in Kansas City at the invitation of Dr. Perry.

Meeting of June 20, 21, 1959

The Council met at Hotel Chase, St. Louis, on June 20, 21, 1959, with J. H. Summers, M.D., Lebanon, Chairman, presiding. Those present were Drs. Summers, Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; B. M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; Ben M. Bull, Ironton; Ralph Perry, Kansas City; R. O. Muether, St. Louis; Charles R. Doyle, St. Louis; H. M. Hardwicke, Jefferson City, and W. F. Francka, Hannibal; Messrs. John Buckner, Springfield; Hollister Smith, Jordan Singleton, Lemoine Skinner, Ray McIntyre, T. R. O'Brien, St. Louis; John W. Noble, Kennett. Drs. Donald M. Dowell, Chillicothe; Joseph C. Peden, St. Louis; H. E. Petersen, St. Joseph; Florence MacInnis, Kansas City; Charles Brasher, Mount Vernon; O. P. Hampton, University City; John I. Matthews, Jefferson City, attended the Sunday session.

MINUTES

Minutes of last meetings of the Council, April 5, 7 and 8, on motion, were approved as published.

INSURANCE

Mr. O'Brien reported that the new hospital and nursing care contract which is to be offered as a supplement to the present group accident and sickness insurance, approved by the Association sometime ago, has been delayed for approval of the insurance commissioner. The carrier, Metropolitan Casualty Company, with other companies, has been merged into a new group of companies called the America Fore Loyalty Group. This organization is now the largest casualty company in the world.

Members will receive shortly an announcement of this merger, and also a statement advising them that their contracts will be assumed by the Commercial Casualty Company. No changes in rates or benefits of the present contracts will be made.

When the insurance commissioner approves of the new contracts, members will be offered two new contracts at attractive rates. (a) A new hospital-nurse expense contract, with $250 or $500 deductible, and full payment of expenses over the deductible amount for hospital expenses and 75 per cent of nursing expenses, up to a maximum of $10,000 per member. Dependents of members may be added under the same arrangement. In addition, office employees and their dependents may be insured under this program. (b) A new non house confinement contract for sickness and accident insurance providing coverage for 7 years for illness and lifetime for accidents at attractive rates.

REFUND OF DUES

A request from a widow of a member for refund of dues was presented. After discussion, it was voted to refund 50 per cent of the dues when requested up to July 1 of any year. If death occurs after July 1, no refund would be made.

MEDICAL SECRETARIES

A request from the Medical Secretaries and Assistants Association for approval of an advisory committee of physicians, on vote, was approved.

FIELD SECRETARY'S REPORT

Mr. McIntyre reported on hospitals now under construction, locations where bond issues had been defeated, recent additions to hospitals completed and under construction, additions planned soon and new hospitals under construction. He reported on recent and coming meetings and on placement of physicians. He stated that a total of 21 preceptors would be needed by the University of Missouri Medical School to begin December 1.

SCHOOL HEALTH CONFERENCE

Mr. McIntyre reported that the annual School Health Conference would be held in Highland Park, Illinois, on October 13 and 14, and on motion, it was voted to ask Dr. Eugene J. Schwartz, Springfield, and Dr. Guy N. Magness, University City, to attend the meeting, expenses to be paid by the Association.

LEGISLATION

Mr. O'Brien presented a report on legislation of interest to physicians which was passed in the recent General Assembly and that which was defeated and discussed some of the bills and procedures that had been used. He said the report would be sent to all members of the Association.

S.B. 50 as finally passed was discussed and, on motion, Senator Noble was thanked for his assistance in the passage of the bill.

Mr. O'Brien said that Mr. Proctor Carter had asked advice in appointment of physicians on the advisory committee on the vendor bill.

DIVISION OF HEALTH

Dr. Hardwicke discussed the work of the Division of Health and several problems it is facing, including: activities required by law, assisting private physicians, reduction and redistribution of personnel, the Hill-Burton law, survey of hospital service areas, venereal disease control, premature program, serology, indigency, hospital licensing, including the small hospital, specialized government funds, pilot programs, especially one on psychosomatic patients, and the Ellis Fischel Cancer Hospital. Dr. Hardwicke was asked to give a written memorandum on phases on which he would wish the advice of the Council, which would then be assigned to appropriate committees.

TREASURER'S REPORT

Dr. Doyle reported on the finances of the Association and recommended that $25,000 be transferred to the investment account. On motion, the report and recommendation were approved.

HOSPITAL INVITATION

A letter from the Missouri Hospital Association suggesting a meeting of chiefs of staff and hospital administrators was presented. After discussion in which the "Recommended Guides for Hospital-Medical Staff Relations" worked out by the Joint Conference Committee of physicians and hospital representatives was discussed, it was voted that an attempt be made to work out a program for such a meeting and that it not be held until after the next Council meeting in September.

Drs. Mulligan, Spelman, Rowlette, Muether and Bricker presented a panel.

DECEASED MEMBERS

A suggested certificate to be sent to families of members who die was presented by Dr. Whitener and, on vote, was approved.

MEDICAL COUNCIL

Dr. Hollweg reported that a Medical Council of the Metropolitan Kansas City Area had been organized and that it was hoped that it might be of assistance in that area.

COMMITTEE ON TUBERCULOSIS

Dr. MacInnis reported for the Committee on Tuberculosis which made the following recommendations:

I. (a) A continuing tuberculosis case finding program. The primary emphasis in this program shall be "Tuberculin Skin Testing."

(b) The guide for implementing it shall be the material contained in "Informational Material for Group Tuberculin Testing," which was prepared and compiled by the Tuberculosis Committee of the Missouri State Medical Association, the Missouri Division of Health, and the Missouri Tuberculosis Association in 1956 and now being revised. Revisions include the following in the guide material:

1. In the pamphlet titled "A Guide to Group Tuberculin Testing," page 4, line 8, delete "1955 edition of diagnostic standards (pages 42-45)," and insert, "1958 edition of tuberculin testing handbook." A copy of this handbook is included in the guide material.

2. Suggested form letter No. 6, "letter to contacts with negative x-rays," second paragraph, "we advise everyone over 15 years of age to have a chest x-ray each year," probably should be deleted.

II. Members of the committee will be requested by the Chairman to write assigned articles having to do with TB control for publication in various issues of Missouri Medicine, the Journal of the Missouri State Medical Association. Suggested titles for these articles will be submitted to the Chairman by the Missouri Division of Health and the Missouri Tuberculosis Association.

On motion, the report was approved.

TUBERCULOSIS CASE FINDING

Dr. Brasher reported that Newton County, with the approval of the Ozarks Medical Society, would like to promote a tuberculosis case finding survey of school children, this to be done by patch tuberculin testing. The Program would be in cooperation with the American School Health Association. The purpose of this cooperation is to make it possible for schools to be certified as tuberculosis-free in this state. He said that this method was first used in 1941 and now is carried out in nine states.

A subcommittee of the American School Health Association and the local county tuberculosis association would direct the local work and certificates would be given to schools in which certain percentages of the students were tested. He said the program would be expected to grow from the school phase and become county wide. Cooperation with osteopathic physicians in such work was discussed and it was felt that this should be worked out at local levels.

On motion, the Newton County project was approved. Upon request of Dr. Brasher, the school certification method was approved.

On motion, it was also approved that a subcommittee of the Committee on Tuberculosis meet with Dr. Hardwicke and representatives of the Missouri Osteopathic Association and persons interested in tuberculosis work, to develop plans for the new tuberculosis control program.

A.M.A.

Drs. Peden and Petersen reported briefly on actions of the A.M.A. at the Atlantic City session. The resolution presented by Missouri Delegates that tax supported hospitals who had osteopaths on the staff be examined on request and without prejudice by the Commission on Hospital Accreditation was acted on favorably. The other Missouri resolution concerning the examination of civilian Air Force personnel was not adopted as it was pointed out that the only examining being done was that of preemployment.

The following report was adopted regarding *"Osteopathy."*

(A) All voluntary professional associations between doctors of medicine and those who practice a system of healing not based on scientific principles are unethical.

(B) Enactment of medical practice acts requiring all who practice as physicians and surgeons to meet the same qualifications, take the same examinations and graduate from schools approved by the same agency should be encouraged by the constituent associations.

(C) It shall not be considered contrary to the Principles of Medical Ethics for doctors of medicine to teach students in an osteopathic college which is in the process of being converted into an approved medical school under the supervision of the A.M.A. Council on Medical Education and Hospitals.

(D) A Liaison committee be appointed by the Board of Trustees of the American Medical Association to meet with representatives of the American Osteopathic Association, if mutually agreeable, to consider problems of common concern including inter-professional relationships on a national level.

The following statements were adopted regarding free choice of physician:

A-7. "Free choice of physician" is an important factor in the provision of good medical care. In order that the principle of "free choice of physician" be maintained and be fully implemented the medical profession should discharge more vigorously its self-imposed responsibility for assuring the competency of physicians' services and their provision at a cost which people can afford.

B-11. Those who receive medical care benefits as a result of collective bargaining should have the widest possible choice from among medical care plans for the provision of such care.

B-16. The A.M.A. believes that free choice of physician is the right of every individual and one which he should be free to exercise as he chooses. Each individual should be accorded the privilege to select and change his physician at will or to select his preferred system of medical care and the A.M.A. vigorously supports the right of the individual to choose between these alternatives.

It was stated that a complete report will be carried in the August issue of MISSOURI MEDICINE.

ANNUAL SESSION

Dr. Matthews reported for the Committee on Scientific and Postgraduate Work which recommended that the session be curtailed to two and a half days and that it begin on Tuesday. After discussion, it was voted that the plan not be accepted and that the Committee be asked to plan the program on the schedule as used in recent years.

A report from the Medical Exhibitors Association on the 1959 Annual Session was presented, showing that the session had been considered good by the majority of exhibitors.

COMMITTEE ON AGING

The following Committee on Aging was announced: Drs. Stanley S. Peterson, Springfield, Chairman; Ralph Perry, Kansas City; Rolla B. Wray, Nevada; Louis H. Kohler, St. Louis; C. Thorpe Ray, Columbia.

COMMITTEE ON REDISTRICTING

The following Committee on Redistricting was announced: Drs. W. F. Francka, Hannibal, Chairman; H. E. Petersen, St. Joseph; Robert B. Bassett, St. Louis; John F. Pearl, St. Clair; J. Loren Washburn, Versailles; Roy Pearse, Nevada; Richard H. Kiene, Kansas City; Kenneth Glover, Mount Vernon; James D. Butts, Rolla; W. D. English, Cardwell.

CORPORATE PRACTICE

The committee and definition of its work in studying the corporate practice of medicine in Missouri was discussed. It was suggested that the committee might limit its study to city and county hospitals in the metropolitan areas to begin with but it was agreed that the committee should determine from the instructions of the House of Delegates how its work should proceed. On motion, it was voted that $5,000 be authorized for the initial implementation of the work of the committee.

INSURANCE

Mr. O'Brien reported that he had sought information on a life insurance plan for members of the Association and so far had a plan from the Financial Planning Company, St. Louis. He gave estimated rates that would apply and said that 22 per cent participation of membership under 70 would be necessary. If that percentage is reached each applicant would be eligible for $10,000 life insurance without physical examination. He said that he would report further as soon as possible.

Members of the House listen to a report.

1962 ANNUAL SESSION

The location, Hotel Chase or the Sheraton-Jefferson, for the 1962 Annual Session was discussed. Mr. O'Brien was asked to obtain data on the difference in cost and report further to the Council.

NEXT MEETING

It was announced that the next Council meeting would be held September 26 and 27, Hotel President, Kansas City.

Past Presidents were honored: Drs. James R. McVay, Kansas City; Cyrus E. Burford, St. Louis; Robert Mueller, St. Louis; C. Souter Smith, Springfield, widow of Dr. Wallis Smith; J. W. Thompson, St. Louis; Guy N. Magness, University City; H. E. Petersen, St. Joseph; Victor B. Buhler, Kansas City; Carl F. Vohs, St. Louis; W. S. Sewell, Springfield; W. F. Francka, Hannibal.

Dr. Louis M. Orr, President of the American Medical Association, gave the banquet address.

Physicians were honored for completion of 50 years of medical practice: Drs. J. H. McCurry, Cash, Ark.; W. O. Finney, Chaffee; Arthur W. Westrup, Webster Groves; Raymond E. Teall, Kansas City; Luther Callaway, Kansas City; Joseph Getelson, Kansas City; Oliver S. Gilliland, Kansas City; George C. Remley, Kansas City; William E. Bess, Sedalia; Albert J. Griot, St. Louis.

Officers were seated at the Speaker's Table.

Dr. Perry presented the gavel to Dr. Muether.

Meeting of September 26, 27, 1959

The Council met at Hotel President, Kansas City, September 26, 27, 1959, with J. H. Summers, M.D., Lebanon, Chairman, presiding. Present were Drs. Summers; Donald M. Dowell, Chillicothe; J. J. Wimp, Kirksville; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; Ben M. Bull, Ironton; Ralph Perry, Kansas City; R. O. Muether, St. Louis; John I. Matthews, Jefferson City; Charles R. Doyle, St. Louis; Messrs. John Noble, Kennett; Don Irish and W. H. Bartleson, Kansas City; John Buckner, Springfield; Lemoine Skinner, Jordan Singleton, Hollister Smith, Ray McIntyre and Tom R. O'Brien, St. Louis, and Helen Penn, St. Louis. During a portion of the meeting Drs. Durward G. Hall and W. S. Sewell, Springfield; H. E. Petersen, St. Joseph, and Vernon E. Wilson, Columbia, were present.

EXECUTIVE SECRETARY'S REPORT

The following report was presented by Mr. O'Brien:

"It occurred to me that, beginning with this meeting and at each meeting hereafter, if you wish, an Executive Secretary's Report should be presented. As I visualize it, the report should not take long to present, it should be mimeographed, and should cover as briefly as possible some highlights of major activities since the last Council meeting.

"Attached to the report is copy of letter received from Dr. Hardwicke and our disposition of the various items listed by Dr. Hardwicke. Of the committees mentioned in our letter, we hope to schedule most of them for October or November meeting dates.

"You were informed by letter, from time to time, as to the Forand hearings. I have tried to thank the various non-medical groups who opposed the bill as well as the many doctors who wrote letters of opposition. Among such non-medical groups were the Missouri State Chamber of Commerce and local affiliates, Missouri Public Expenditure Survey, the insurance industry, Blue Shield, Druggists Association and the Missouri Farm Bureau Federation. The bill, of course, was laid to rest for this year but will be very much on the agenda of Congress in 1960, the election year.

"The new State Board of the Healing Arts has been appointed since our last meeting. I had two sessions with Governor Blair regarding that. I suggested to him that he is as much interested in seeing that this board gets off to a good start as we are; otherwise, he would not have included the item in his message to the legislature at the beginning of this year.

"The appointment of Drs. Perry, Francka, Sewell, O'Reilly and Loyd, as well as the osteopathic members, Drs. Michael and Matheny, indicates that the Governor agreed with us about getting off to a good start and that persons familiar with the purposes of the act should serve on the first board. I thanked the Governor for his consideration of our suggestions. Incidentally, Dr. Sewell was elected President and Dr. Loyd of Jefferson City was elected Secretary. (Dr. Perry may wish to comment about the first meeting which was held on September 20.)

"The Advisory Committee to the Division of Welfare was appointed by Mr. Carter, Director of that agency. Drs. Stanley Peterson, Chairman of the MSMA Committee on Aging, and Avery Rowlette, Chairman of the MSMA Committee on Medical Economies, were appointed to serve on this seven man committee. They attended the first meeting, as did I, and assisted in the development of rules and regulations for the hospitalization or nursing home care of welfare recipients. You will recall that the legislation followed the outline recommended by the House of Delegates in that all funds are to be used for hospitalization or nursing home care."

On motion of Dr. Hollweg, it was voted that the Executive Secretary be asked to continue a written report to the Council.

DIVISION OF HEALTH

The letter from Dr. Hardwicke concerning the Division of Health and the answer to the letter which gives the referrals of the various items to committees, both of which were presented at the meeting, were discussed.

BOARD OF HEALING ARTS

Dr. Perry reported briefly on the recent meeting of the new State Board of the Healing Arts. He said that personnel to assist the Board had been selected and that type of examination was under consideration.

A.M.A. MEETINGS

On motion it was voted to pay the expenses of Dr. John J. O'Hearne, Kansas City, Chairman of the Committee on Mental Health, and of Dr. Carl D. Siegel, Sedalia, Chairman of the Committee on Civil Defense, to meetings in these fields which will be held soon by the A.M.A.

TREASURER'S REPORT

Dr. Doyle gave a report of receipts and disbursements during the first eight months of the year, together with comparison with the budget which had been approved. The report showed the finances within the budget.

Authorization was asked and voted to sell and reinvest the money from a $5,000.00 Series K government bond. This particular bond requires the endorsement of officers of the Association and a resolution was adopted authorizing any two of the officers to endorse such bonds.

The purchase of a new addressograph for the office was approved.

FIELD SECRETARY'S REPORT

Mr. McIntyre reported the locations and names of thirty-one physicians who have located recently in rural Missouri. He said that most of these doctors received information on Missouri locations through the State Medical Association Placement Department.

Mr. McIntyre described the work of the Sears Roebuck Foundation in aiding rural communities to survey their need for additional doctors and told of locations in Missouri where this had been done and where communities were raising funds to build a doctor's clinic to help attract a physician to the locality.

He announced that the University of Missouri Medical School Preceptorshop Program this year will include four six-week periods beginning on December 4, January 6, February 29 and April 12. He said that the number of preceptees this year is twenty-one, double that of last year. Rural physicians to serve as preceptors are being solicited.

He announced that Dr. E. J. Schwartz, Springfield, Chairman of the Committee on Infant and Child Care, had appeared on the program of the Missouri Association of School Administrators at a workship in Columbia on June 25. He said that the committee on Infant and Child Care thought it advisable for each component society to have a functioning committee on school health to work with their local schools.

He told of a dinner meeting at St. Louis Medical Society on September 15, with the athletic coaches of the area at which athletic injuries were discussed.

He announced a meeting to be held by the A.M.A. on the "Medical Aspects of Sports" on November 30, in Dallas, Texas, immediately preceding the A.M.A. Clinical Session, December 1-4. The National Conference on Physicians and Schools will be held at Highland Park, Illinois, October 13-15, and will be attended by Drs. E. J. Schwartz, Springfield, and Guy Magness, University City, members of the Committee on Infant and Child Care.

Mr. McIntyre reported on the A.M.A. Public Relations Conference held in Chicago in August and presented reprints from the *Congressional Record* of a presentation by Hon. Clark W. Thampson of Texas in the House of Representatives on "The Medical Education Situation," representing an exchange of letters between Rep. Thompson and his longtime friend, Dr. Blasingame of the A.M.A.

Dr. Sutton gave one of the refresher courses.

Mr. McIntyre reported on attending a session of a course in practical politics being taken by members of the Greene County Medical Society. This course is promoted by the U. S. Chamber of Commerce and the Missouri State Chamber of Commerce. Dr. Tillman and Dr. Hall added briefly to the report.

The Field Secretary closed his report with a brief run-down on medical society meetings he had recently attended, including Ozarks, West Central and a joint meeting at Clinton.

Dr. John R. McDaniel reported for the Committee on Health and Public Instruction as appears on page 832. On motion, the report was accepted by the Council.

ANNUAL SESSION PROGRAM

Dr. Matthews reviewed the program for the 1960 Annual Session to be held in St. Louis, March 13 to 16, and said that it was near completion and that it would appear in a forthcoming issue of MISSOURI MEDICINE.

DEFINITION OF WORD "PHYSICIAN"

A letter from the St. Louis Medical Society asking that clarification of the definition of "Physician" be obtained was read. The situation of absentee ballots being signed by a chiropractor was discussed and the consensus was that this case should not be pursued further at this time; also it was felt that the final section of S.B. 50 would bring about some clarification.

CONSULTATION

The question of consultation with osteopathic physicians as presented by a member of a component society was discussed. It was felt that this must be decided at the component society level. It was suggested that the A.M.A. delegates attempt to get better clarification from the A.M.A.

WOMAN'S AUXILIARY

Mrs. Stanley S. Peterson, Springfield, President of the Woman's Auxiliary, reported on the work of the Auxiliary and discussed the Sunday evening reception preceding the Annual Session, the possible need of an executive secretary for the Woman's Auxiliary, reprints of the Woman's Auxiliary page in MISSOURI MEDICINE, and space for files.

After thanking Mrs. Peterson for her presentation and discussion, it was decided that the Association should not take over the Sunday evening reception and that more space would be given the Auxiliary for files in the Association office. It was suggested that the Woman's Auxiliary present a report to the House of Delegates.

LEGISLATIVE MEETING

A National Legislative Conference to be held in St. Louis on October 2 and 3 was announced.

CORPORATE PRACTICE

Dr. Muether presented the following report from the Special Committee to Study the Corporate Practice of Medicine:

"The Special Committee to Study the Corporate Practice of Medicine met at the Coronado Hotel, St. Louis, September 13, 1959.

PURPOSE

"Dr. Muether reviewed the action of the House of Delegates, 'That a special committee be appointed to investigate all instances said to entail the corporate practice of medicine, to recommend to the Council courses of action in those cases which the committee determines to involve the corporate practice of medicine and to be against the long-range interest of the public and, with the approval of the Council, take whatever legal or legislative steps are necessary to force cessation of such practice in the interest of the public's welfare. It is further recommended that this committee be made up of nine members including representation of various fields of medical interest, and should be empowered, subject to Council approval, to employ legal counsel, research assistance and other consultants in specialized or technical areas which may be necessary in the course of their work. . . . '

PANEL AND FREE CHOICE

"Actions of the House of Delegates in regard to panel systems and free choice were reviewed briefly, it being pointed out that the A.M.A. has softened its attitude to some of the plans of medical care, the main thing seeming to base on competency of the care given, and the privilege of the patient to have the right to choose his method of receiving care, if not the absolute choice of physician. It was pointed out that fringe benefits being untaxable has caused promotion of many plans. Reviewing the A.M.A. stand concerning panel systems, the A.M.A. does not oppose them as such and leaves it to state associations to handle in the individual states.

POSSIBLE INSTANCES OF CORPORATE PRACTICE

"The members of the committee presented instances of what each thought might be termed the corporate practice of medicine, reviewing the recommendations of the House of Delegates on what should be condemned as the corporate practice of medicine as follows:

"1. Governmental institutions which are primarily tax supported but which charge patients deemed able to pay.

"2. General hospitals, which have teaching programs and charge for the services of physicians in training.

"3. Closed panel system which charge for the services on either a prepayment or post-payment basis.

"4. Private individuals or corporations which employ physicians and purvey their services for profit.

"Also taken into consideration were the exclusions set out by the House of Delegates, as follows:

"1. Medical Schools and their affiliated teaching hospitals where full-time employed instructors, primarily engaged in the teaching of undergraduate medical students in addition to supervising the treatment of medical and surgical patients, charge for their personal services.

"2. State and City institutions for the treatment of chronic conditions such as mental illness and tuberculosis, which care for private patients referred by individual practicing physicians.

CONCLUSION

"After discussion of what was known, or premised, about several institutions, the trend of patients to remain in institutions where charges will be less, situation of residents and interns in performing services in a physician's name, possible exploitation of physicians by some hospitals, special funds set up by certain hospitals, it was decided that not enough specific information was available and that a survey or some means of obtaining this information would be necessary before any definitive action could be recommended.

DEFINITION

"Further discussion brought out that the definition set forth by the House of Delegates of corporate practice might not be sufficiently encompassing, the definition reading: 'The corporate practice of medicine is a system which involves the employment of a physician by an individual organization (other than an individual physician or organization composed solely and exclusively of physicians) for the purpose of rendering medical care or services to patients when the fees or remuneration for such services collected by the organization, by a department thereof or by the associated organization and used for its general purposes rather than fully for the direct compensation of the physician rendering the care.'

ACTION

"It was decided that the following would be necessary before the committee could intelligently start on special work:

"1. Definition of corporate practice of medicine should be obtained from legal sources, from the Judicial Council of the A.M.A. from other states and, if possible, from the Attorney-General of Missouri.

"2. Employment of help for a survey, either an individual or a company that does this type of work.

"3. The working out of a dossier explaining purpose of the survey and a questionnaire that would be used.

"It was suggested that members of the committee submit questions that should be used in the survey.

COUNCIL ADVICE

"It was decided to present these actions to the Council for approval before proceeding with the work."

On motion of Dr. Tillman, recommendation 1 was approved. On motion of Dr. Doyle, recommendations 2 and 3 were approved.

AMEF

Material which will appear in the October issue of Missouri Medicine on the American Medical Education Foundation was presented and it was announced that a letter would go to each member soon after the first of October, October being designated AMEF month.

LIFE INSURANCE

A group life insurance proposal of the Financial Planning Company of St. Louis, reported at the Council meeting of June 25, a verbal proposal of Eggert-Carroll-Schroeder and Altman Singleton Company, to provide similar coverage, and a letter from the Insurance Research Company of St. Louis proposing a comprehensive program of life insurance, annuity and mutual investment fund benefits were discussed.

Officers were seated at the speaker's table at the banquet.

The Jackson County Medical Society has been studying proposals for a group life insurance program for many months and two offerings which were made to that organization were presented.

The failure of such programs in the past, including those of St. Louis and Jackson County Medical Society which did not secure a sufficient number of applicants, were discussed. The reason why such programs failed in the past were brought out.

After discussion, it was agreed that the program proposed by Insurance Research Company should be studied further, subject to clarification and further consideration of the Council.

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Clinical reports on Dartal: 1. Edisen, C. B., and Samuels, A. S.: A.M.A. Arch. Neurol. & Psychiat. *80*:481 (Oct.) 1958. 2. Ferrand, P. T.: Minnesota Med. *41*:853 (Dec.) 1958. 3. Mathews, F. P.: Am. J. Psychiat. *114*:1034 (May) 1958.

SEARLE

DISABILITY INSURANCE

The program of disability insurance was approved by the Council at its June meeting. Following that meeting a brochure was prepared by the insurance company which included one item which had not been contained in the original proposal. This related to the offering of surgical benefits to members on an optional basis.

On motion of Dr. Whitener it was agreed to include the surgical benefit option in the material which will be sent to all members.

BUDGET COMMITTEE

The Chairman appointed the following Budget Committee: Dr. Doyle, Chairman; Drs. Perry, Muether, Stuart, Bull and Tillman with the Chairman ex officio. He announced that the committee would meet on Friday evening preceding the next Council meeting.

HOSPITAL LICENSING

Dr. Stuart presented a letter from the Callaway County Hospital asking assistance in clarifying the rules and regulations concerning hospital licensing. After discussion, on motion of Dr. Tillman, the material from the hospital was referred to the Committee on Hospital and Professional Relations with the request that the committee report to the Council at its next meeting.

Several refresher courses were presented.

HOSPITAL ADMINISTRATORS MEETING

A meeting of hospital administrators, hospital trustees and chiefs of hospital medical staffs, proposed by the Missouri Hospital Association, was discussed. A preliminary meeting to discuss possible dates, location and topics for discussion is to be held during the next two weeks.

A Recommended Guide for Hospital Medical Staff Relations, originally proposed by the Missouri Hospital Association, which was approved by the MSMA House of Delegates in 1958, has been rejected by the Missouri Hospital Association. This will be reported on further after the Committee on Hospital and Professional Relations meets.

GREENE COUNTY BY-LAWS

New by-laws of the Greene County Medical Society were explained as setting up a Medical Education Foundation. It was stated that these had been checked with the Association by-laws and by our attorney. On motion of Dr. Stuart, the by-laws were approved.

EDITORIAL BOARD

Dr. Doyle announced two replacements on the Editorial Board: Dr. Carl A. Moyer, St. Louis, to replace Dr. A. N. Arneson, and Dr. Robert Jackson, Columbia, to replace Dr. Roscoe L. Pullen.

THANKS TO DR. AND MRS. PERRY

On motion of Dr. Stuart, Dr. and Mrs. Perry were thanked for the party on Saturday evening to which Councilors were invited.

REPRESENTATIVE CURTIS

Mr. James Foristel of the Washington A.M.A. Office and Representative Tom Curtis from Missouri visited and spoke to the Council briefly. Representative Curtis praised physicians for their growing interest in citizenship. He said their broader interest would dispel the feeling that the doctor is narrow and only interested in legislation that affected him directly.

NEXT MEETING

It was decided that the next meeting of the Council would be held at Hotel Chase, St. Louis, on December 12 and 13.

Meeting of December 12, 13, 1959

The Council met at Hotel Chase, St. Louis, December 12, 13, 1959, with J. H. Summers, M.D., Lebanon, Chairman, presiding. Those present were Drs. Summers, Donald M. Dowell, Chillicothe; J. J. Wimp, Kirksville; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; Ben M. Bull, Ironton; Ralph Perry, Kansas City; R. O. Muether, St. Louis; John I. Matthews, Jefferson City; Charles R. Doyle, St. Louis; Vernon E. Wilson, Columbia; H. M. Hardwicke, Jefferson City; Hollis N. Allen, St. Louis; Edwin M. Powell, Springfield; Stanley S. Peterson, Springfield; Rolla B. Wray, Nevada; Durward G. Hall, Springfield; Joseph C. Peden, St. Louis; Messrs. John Buckner, Springfield; Hollister Smith, St. Louis; Lemoine Skinner, Jordan Singleton, Ray McIntyre, T. R. O'Brien and Miss Helen Penn, St. Louis.

EXECUTIVE SECRETARY'S REPORT

Mr. O'Brien gave the following report:

1. *Missouri State Crippled Children's Service.*—As required by the new statute, a general advisory committee for the Crippled Children's Service, with a majority of physicians in its membership, has been appointed. The members of the Committee are: Robert W. Augustine, M.D., St. Joseph; Warren C. Baker, M.D., Savannah; Fred J. Biggs, M.D., Poplar Bluff; Thomas H. Burford, M.D., Ralph K. Earp, M.D., Luke A. Knese, M.D., St. Louis; Edgar L. Clayton, M.D., Senator Jack S. Curtis, Mrs. Justine Phillips, Springfield; John H. Gaskins, M.D., Frank L. Dickson, M.D., Kansas City; Rosellen E. Cohnberg, M.D., Monett; Daniel B. Landau, M.D., Hannibal; Jack Mullen, M.D., Bonne Terre; Thomas G. Otto, M.D., Senator Albert M. Spradling, Jr., Cape Girardeau; Mr. Proctor N. Carter, Mrs. Chilton J. Estes, Mr. Neil C. Wortley, Jefferson City; Sydney E.

Jaynes, D.M.D., Columbia; Charles L. Judd, D.O., Unionville; Mrs. Carl L. Luecke, Joplin; Mrs. A. L. Luther, Memphis; and Mrs. Hal McHaney, Kennett.

The first meeting of the advisory committee was held in Columbia on October 25. One matter of interest to the Council may be the following statement taken in substance from the minutes of the committee meeting:

"The fees for professional personnel were discussed. There is need for re-examination of this schedule now that insurance payments are acceptable. In this regard it was noted that insurance payments are not, under the law, made to the State Crippled Children's Service, but to the doctor or hospital directly. This will present some administrative difficulties in instances when insurance payment is made to a physician since the Crippled Children's Service will not allow him fees if insurance compensation is available."

Dr. Muether is congratulated at the banquet.

This raises a question as to what the fee relationship between doctors and the Crippled Children's Service really ought to be. Surely the doctor should receive insurance payments directly. If such payments are inadequate for the care rendered, should they be supplemented by the Service?

2. *Chiropractic.*—There is continuing evidence of the vigorous efforts of organized chiropractors in the state to extend their practice and their practice rights. The October issue of the *Bulletin of the Missouri Chiropractic Association* contains a significant new definition of chiropractic recently accepted by the North American Association of Chiropractic Schools and Colleges. It points up the need for our continuing concern about chiropractic, and it goes as follows:

"The science of chiropractic deals with the relationships between the articulations of the vertebral column and the nervous system and the role of these relationships in the restoration and maintenance of health."

This language recalls the attempt in the last General Assembly to "broaden the scope of chiropractors" practice rights to include "areas adjacent" to the spine. This new definition would seem to aim at making the chiropractic area of practice coextensive with the nervous system throughout the entire body.

3. *Meetings and Conferences.*—The A.M.A. Legislative Conference was held in St. Louis, October 2 and 3 to make plans for rallying and alerting the profession to the danger of legislation like the Forand Bill in the election year of 1960. Speakers included Governor Smylie of Idaho and Congressmen Curtis of Missouri and Alford of Arkansas.

On October 19, Dr. Perry addressed a meeting of the Fifth Councilor District at Columbia. He spoke primarily of the challenge posed by the Forand Bill. I was also asked to review briefly recent developments in Missouri Medical Service.

The State Medical Journal Conference was held in Chicago on October 26 and 27. Mr. Ovid Bell of Fulton, printer of MISSOURI MEDICINE, was on the program. A picture of our journal was featured on the front page of the conference program, and in the competitive scoring for excellence MISSOURI MEDICINE rated 89, which is a very high score. Very few journals got a mark of 90, which was the highest mark. Our editor, contributing editors, the editorial board, the publication committee and Helen Penn and Ray McIntyre are all to be complimented on this fine showing. (I'd like at this time to break into my report and call on Helen to give you a more detailed report on how the grading was done and what the rating of our journal means.)

JOURNAL CONFERENCE

Miss Penn explained that at the conference the grading of journals was done by O. M. Forkert Associates, publications consultants, and that journals were judged as national publications on various things.

EXECUTIVE SECRETARY'S REPORT CONTINUED

The MSMA Committee on Aging met in Jefferson City on October 29. The staff was represented at the meeting by Ray McIntyre and Jordan Singleton of our public relations office. The report of the committee is on the agenda of this meeting of the Council.

The Committee on Medical Economics met in St. Louis on November 1.

Dr. Hardwicke and Dr. Belden of the State Division of Health were present, and the staff was represented by Helen Penn, Lemoine Skinner, Jordan Singleton and me. The committee report is also on this Council meeting agenda.

The special committee to study the question of representation of constituent medical societies in the MSMA House of Delegates and the adequacy of the present Councilor District set-up met in St. Louis on November 15. There was thorough discussion of both matters, but the committee deferred action until a subsequent meeting. It was felt that the St. Louis County Society, whose representative was unable to attend the first meeting, should be heard. Helen Penn, Lemoine Skinner, and I were present for the staff.

On November 16 and 17, Ray McIntyre and Jordan Singleton were MSMA staff representatives at the A.M.A. Regional Conference on Aging at Kansas City. President Perry and Drs. Stanley Peterson and Rolla Wray of the MSMA Committee on Aging took part directly in the proceedings of the Conference.

During the week of November 30 your delegates attended the session of the A.M.A. in Dallas, and they will have a report for you at this meeting. I shall not comment on my own notes of the A.M.A. meeting until after the delegates' report, and then I expect there will be nothing that I can add.

4. *Miscellaneous Matters.*—A question was asked at the last meeting of the Council regarding the proposed

meeting of Missouri Hospital Administrators, trustees and chiefs of staff. I am now able to report definitely that plans for such a meeting have been put off at least until next year.

I hope the Council will be as pleased as the staff is when I say the new addressograph machine you authorized us to buy is doing a first-rate job. The girls in the office are delighted with it. On the subject of the girls, I report with a mixture of pleasure and regret that Margo is soon to have a baby and will be leaving us to take up what, perhaps, we can all agree is more important work.

MEDICARE

Mr. O'Brien presented the revised contract for Medicare and explained that the program would revert to those provisions included prior to October 1958 when the program was curtailed. After discussion, it was decided that a bulletin should go to members pointing out the changes and that the present contract should be signed.

BLUE SHIELD

It was announced that a major medical program had been placed in effect by Blue Shield and Blue Cross of St. Louis for employees of the Southwestern Bell Telephone Company. The program for the Telephone Company is a combination of basic coverage with major medical. There is a small deductible amount which the subscriber pays. After the basic coverage is used up, the combined plans pay 80 per cent of remaining bills, the subscriber pays the remaining 20 per cent.

UNITED FUND

Mr. O'Brien announced that for the second year the Association office had received a plaque from the United Fund denoting that all employees had contributed.

MEETING ATTENDANCE REQUIREMENT

A letter from Dr. Michael, osteopathic member of the Board of the Healing Arts, was read in which it was suggested that attendance at medical meetings be a requirement for the biennial registration of physicians. In discussion, it was brought out that this provision had been taken out of the legislative bill establishing the board and that the Council would not have the prerogative to act on the question. On motion, the suggestion was referred to the Committee on Scientific and Postgraduate Work for study and possible referral to the House of Delegates.

LIAISON COMMITTEE WITH OSTEOPATHS

A letter requesting that a liaison committee meet with members of the osteopathic association to discuss mutual problems was discussed and on motion, the Chairman was instructed to appoint a committee of five council members to serve on such a committee.

MEDICO-LEGAL

The following suggested legislation referred by the board of the Missouri Academy of General Practice was presented.

Married Persons Declared to Be Adults, Regardless of Age

"All persons who have contracted a lawful marriage, shall be deemed to be of the age of majority and to be an adult person for the purpose of entering into any contract respecting medical or surgical care and to consent to medical care and surgical operations for himself or herself and for his or her spouse and children."

Physicians Lien Law

"All physicians and surgeons who render services to patients who shall receive or become entitled to receive monies by way of compensation, claim, judgment, settlement or insurance contract for the condition or injury for which such services are rendered shall have a lien upon such monies for the reasonable value of such services, and said lien shall be valid and binding both as to the person to whom said services had been rendered and any person, firm or corporation who shall, either by contract, settlement or judgment, pay or be bound to pay any such person to whom said services have been rendered, provided notice of such lien shall be mailed to said person, firm or corporation."

Order was maintained during the Woman's Auxiliary Sunday evening entertainment.

On motion, these were given to Mr. Noble for study and later report to the Council.

MEDICAL ECONOMICS

The report of the Committee on Medical Economics, Dr. A. P. Rowlette, Chairman, was presented as appears on page 828.

On motion, the report was accepted.

TREASURER'S REPORT

The Treasurer reported on the financial condition of the Association and, on motion, the report was accepted.

BUDGET

The Treasurer presented the following budget for 1960, which was approved by the Council:

Salaries	$ 62,338.00
Office Rent	4,700.00
Postage	4,500.00
Printing & Stationery	5,000.00
Journal expense	50,000.00
Telephone & Telegraph	2,800.00
Insurance & Retirement	6,500.00
Professional fees	4,000.00
Taxes—payroll	1,850.00
Travel expense	7,000.00

Committees	43,850.00
Furniture & Fixtures	1,500.00
General expense	3,000.00
Total	$197,038.00

LIFE INSURANCE

A life insurance program for members of the Association was reported on further and it was said that a representative would appear before the Council if desired. After discussion, it was voted that the Chairman appoint a committee to talk with insurance representatives and report to the Council.

FIELD SECRETARY'S REPORT

Mr. McIntyre said that county society and regional meetings had been especially well attended this fall. He told of the following meetings which he had attended: Southeast Missouri Cancer Conference, public relations meeting of the Chariton-Macon-Monroe-Randolph County Medical Society, Conference on Physicians and Schools, Mineral Area County Medical Society, Lincoln-St. Charles County Medical Society, Committee on Control of Venereal Disease, Committee on Aging, Missouri Academy of General Practice, Regional Conference on Aging, seven county meeting at Sedalia, American Medical Association and Grand River Medical Society.

Physicians received 50 year pins at the banquet.

He announced a two day meeting on "Chest Diseases" to be presented in Mount Vernon on January 9 and 10, Committee on Maternal Welfare on January 10, Committees on Rural Health and Medical Education and Hospitals on January 17; Eighth Councilor District meeting at Mount Vernon on February 9, National Health Conference at Grand Rapids on February 25-27.

He reported on the preceptorship program at the University of Missouri and said that preceptees were with physicians at the present time. Four groups will be completed during the winter months.

ANNUAL SESSION

Dr. Matthews presented the program for the 1960 Annual Session. He said that scientific exhibits would be mostly by invitation.

He discussed annual sessions in general and said that an attempt would be made to determine just who attended, why they did and from where they came and that a simple form would be at the registration desk attempting to obtain this information. He asked that each Councilor encourage his membership to attend.

The possibility of entertaining new members for the purpose of indoctrination was discussed and on motion, Dr. Matthews was instructed to plan something in this line at an expenditure of not more than $1,000. That amount was added to the 1960 Budget for the Annual Session.

He said there would be a charge for the refresher courses. He outlined some of the publicity that will be used to acquaint members with the program and the meeting. It was decided that a tear-sheet appear in MISSOURI MEDICINE that physicians may use on their door or waiting room explaining their absence for the annual session.

DEAN WILSON

Dr. Wilson addressed the Council briefly expressing his appreciation for being invited and encouraging Councilors to contact him at any time on things dealing with the University.

A.M.A.

Dr. Hall spoke briefly and Dr. Wray more extensively in reporting the Clinical Session of the A.M.A. Dr. Wray pointed out that the full report would be published in the January issue of MISSOURI MEDICINE.

WHITE HOUSE CONFERENCE

Dr. Summers appointed Dr. Ralph Perry and Dr. C. Thorpe Ray to represent the Association on the Committee on Aging at the 1961 White House Conference.

COMMITTEES

Dr. Perry appointed Dr. W. F. Francka to fill the unexpired term of the late Dr. W. Logan Allee on the Committee on Constitution and By-laws. He appointed Dr. G. W. Winn to fill the unexpired term of the late Dr. E. R. Breuer on the Committee on Medical Economics.

COMMITTEE ON AGING

Dr. Stanley S. Peterson presented the report for the Committee on Aging as appears on page 843.

On motion, the report was accepted with authorization to continue the work of the committee.

LABORATORY MEDICINE

Dr. Hollis N. Allen presented the report of the Committee on Laboratory Medicine as appears on page 840.

The Council accepted the report.

HOSPITAL AND PROFESSIONAL RELATIONS

Dr. Hollis N. Allen presented the report of the Committee on Hospital and Professional Relations as appears on page 838.

On motion, the reports were accepted.

IOWA SCHOOL MATERIAL ON HEALTH

Material which has been promoted in Iowa by the hospital association, to be distributed through the schools, was presented. It was pointed out that the material placed practically all emphasis on the hospital as the center of health. The feeling of the Council was that the physician should have had a more prominent place in the pictures and literature. It was reported that it had been heard that it might be used in Missouri.

On motion, it was decided to contact the Department of Education in Missouri and get more definite information for further study and action.

COMMITTEE ON CONTROL OF VENEREAL DISEASE

Dr. Edwin N. Powell presented the report of the Committee on Control of Venereal Disease as appears on page 834.

On motion, the report was accepted.

SKIN TESTING FOR TUBERCULOSIS

Dr. Tillman and Dr. Hardwicke reported on the program of skin testing being carried out in Newton County. Dr. Tillman said that of 6,583 students, 6,236 had been checked, or 94.7 per cent. Positive reactions were found in 2.68 per cent, and doubtful in 1.1, with positive reactions found in 29.1 of school employees and personnel. They said that work was still continuing on contacts of positive reactors. It was reported that physicians co-operated fully in the program and that newspapers were co-operative.

On motion, it was voted that Dr. Hardwicke be given approval to go into another community with a similar study.

Meeting of February 13, 14, 1960

The Council met at Hotel Chase, St. Louis, February 13, 14, 1960, with J. H. Summers, M.D., Lebanon, Chairman, presiding. Those present were Drs. Summers; Donald M. Dowell, Chillicothe; J. J. Wimp, Kirksville; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; Ben M. Bull, Ironton; Ralph Perry, Kansas City; R. O. Muether, St. Louis; John I. Matthews, Jefferson City; Charles R. Doyle, St. Louis; Oscar P. Hampton, University City; Vernon E. Wilson, Columbia; H. M. Hardwicke, Jefferson City; Messrs. John W. Noble, Kennett; Martin Baker, Wichita; W. H. Bartleson, Kansas City; John Buckner, Springfield; Ed Mothershead, St. Louis; Hollister Smith, St. Louis; Lemoine Skinner, Jordan Singleton, Ray McIntyre, T. R. O'Brien, St. Louis; Helen Penn, St. Louis. Drs. Durward G. Hall, Springfield; H. E. Petersen, St. Joseph; and Joseph C. Peden, St. Louis, attended the Sunday Session. Mr. Harry M. Piper, St. Louis, president of the Missouri Hospital Association, Mr. Donald Horsh, chairman of the Missouri Hospital Association's educational committee, and Mr. R. E. Holtz, of Paul S. Amidon & Association, Minneapolis, attended a part of the Saturday session.

Dr. Muether presented the Past President's key to Dr. Perry.

"IN QUEST OF HEALTH—THE HOSPITAL STORY"

Mr. O'Brien reported that efforts had been made in some places in Missouri by the Missouri Hospital Association to introduce the program. He read correspondence with Mr. Amidon and reported on a conference with representatives of the Hospital Association, but that they reported afterward that they were going ahead with the program. He said that information had gone to county societies concerning the program. Two analyses of the literature were presented to the Council. Action was delayed until representatives of the Hospital Association would appear before the Council. Dr. Hardwicke called attention to the fact that the Division of Health and the Committee on Infant and Child Care were working on a general school manual on health.

The Woman's Auxiliary board met during the session.

WHITE HOUSE CONFERENCE

Dr. Hardwicke discussed the work of Task Force No. 4, dealing with "Health and Medical Care" of the Missouri Conference on Aging which was set up as part of the White House Conference on Aging of 1961. Drs. Ralph Perry, Stanley S. Peterson and C. Thorpe Ray, all members of MSMA Committee on Aging, are members of this Task Force. He said that at first there was a preponderance of nonmedical people on the committee but that had changed.

It was pointed out that what is approved by the task force will be presented to the Missouri Conference for approval. The report is as follows:

"A." WHAT CONSTITUTES ADEQUATE HEALTH AND MEDICAL CARE FOR THE AGING PEOPLE IN MISSOURI

Adequate Medical Care—Shall consist of the ready availability of essential services which shall achieve and maintain the proper balance between physical, mental, emotional and spiritual attributes of good health and shall be rendered in keeping with standards acceptable to the community.

These services shall consist of, but not necessarily be limited to:

a. Physicians' services

b. Progressive hospitalization
c. Preventive medical and public health services
d. Supportive services and material

Physicians' Services—Ideally the health care of an individual should be directed by the patient's personal physician. This should embrace preventive, remedial, and health education as prescribed.

Progressive Hospitalization—Is the adjustment of institutional services to the need of the patient who shall ideally progress from intensive care through his convalescence, rehabilitation and re-education. Progressive care may, therefore, embrace acute hospital care, convalescent hospital care, nursing home care, home care and home maker services, rehabilitation and re-education.

Preventive Medical and Public Health Services—Is the utilization of the various capabilities and skills of the public health services in the maintenance of health and the application of recognized public health principles and techniques in the prevention of disease.

Supportive Services and Material—It is recognized that other disciplines are equally important to the preservation of health and recognizing also that total health is achieved only through the utilization of total resources—individuals and material. Therefore, allied professions working closely with physicians and having available the necessary therapeutic modalities and services may as a team offer optimum health protection through services and education to the citizens of this state.

"B." HOW CAN WE ACHIEVE SUCH HEALTH AND MEDICAL CARE?

The fact that we live in a changing society cannot be denied. The changes which have taken place in the past fifty years and more particularly in the past fifteen years present new and unique problems to social planners. It is the consensus of Task Force No. 4 that simply because new and unique problems appear within our social structure need not call for any new and unique solutions. Certain basic tenets and philosophies have played an all-important part in the continued growth and increasing strength of this country. Perhaps the most basic of these tenets is the concept of free enterprise. Perhaps the second most important and basic concept is the enduring conviction that the integrity of individual citizen must be preserved.

It would appear that as a result of the exercise of those two basic concepts the citizens of this country now receive the highest level of medical care to be found anywhere in the world. It would appear equally true that as a result of the exercise of these concepts the majority of citizens of this state and country are in a position to purchase adequate medical care.

The fact that there has emerged within the past few years a new and challenging problem in the field of social adjustment should not be permitted to cause us in our planning to forget the achievements which have become characteristic of the American culture nor should we forget or overlook in seeking a solution to a new problem, the basic tenets that made these achievements possible.

It is therefore the considered opinion of Task Force No. 4, Health and Medical Care, that the principles of individual freedom and of free enterprise should be maintained throughout all social planning. It is recognized by Task Force No. 4 that socio-economic adjustments are frequently the result of social pressure. At no time should these pressures be permitted to cause those who have the responsibility for planning for the future to forget the intrinsic values which have demonstrated their validity in the past. Task Force No. 4 therefore recommends that there be developed:

1. an ongoing educational program which will be aimed at the acceptance of the principle of voluntary health insurance by the majority of the people.
2. that corporations engaged in the business of selling insurance be urged to develop health insurance programs which will anticipate possible and probable income reductions with advancing age.
3. that the society as a whole recognize that there now exists and probably will continue to exist an irreductible minimum percentage of persons who are both socially and medically indigent.
4. that persons who are socially and medically indigent should be treated as a problem separate and distinct from that presented by the majority of the citizens of this state and country.
5. that the solution to the problem of the indigent is best found at the community level and as a result of mobilizing the resources of the community with minimal help from the federal level.

Task Force No. 4 wishes to emphasize that the majority of the citizens of this state and country are now providing for their own future through savings and insurance. It is the considered opinion of this group that the majority, therefore, should be encouraged to continue to exercise the same judgment in the conduct of their own affairs that they are now demonstrating. It is the further thought of the committee that any effort to minimize the responsibility of the individual for his own future is destructive to basic American traditions and should be discouraged.

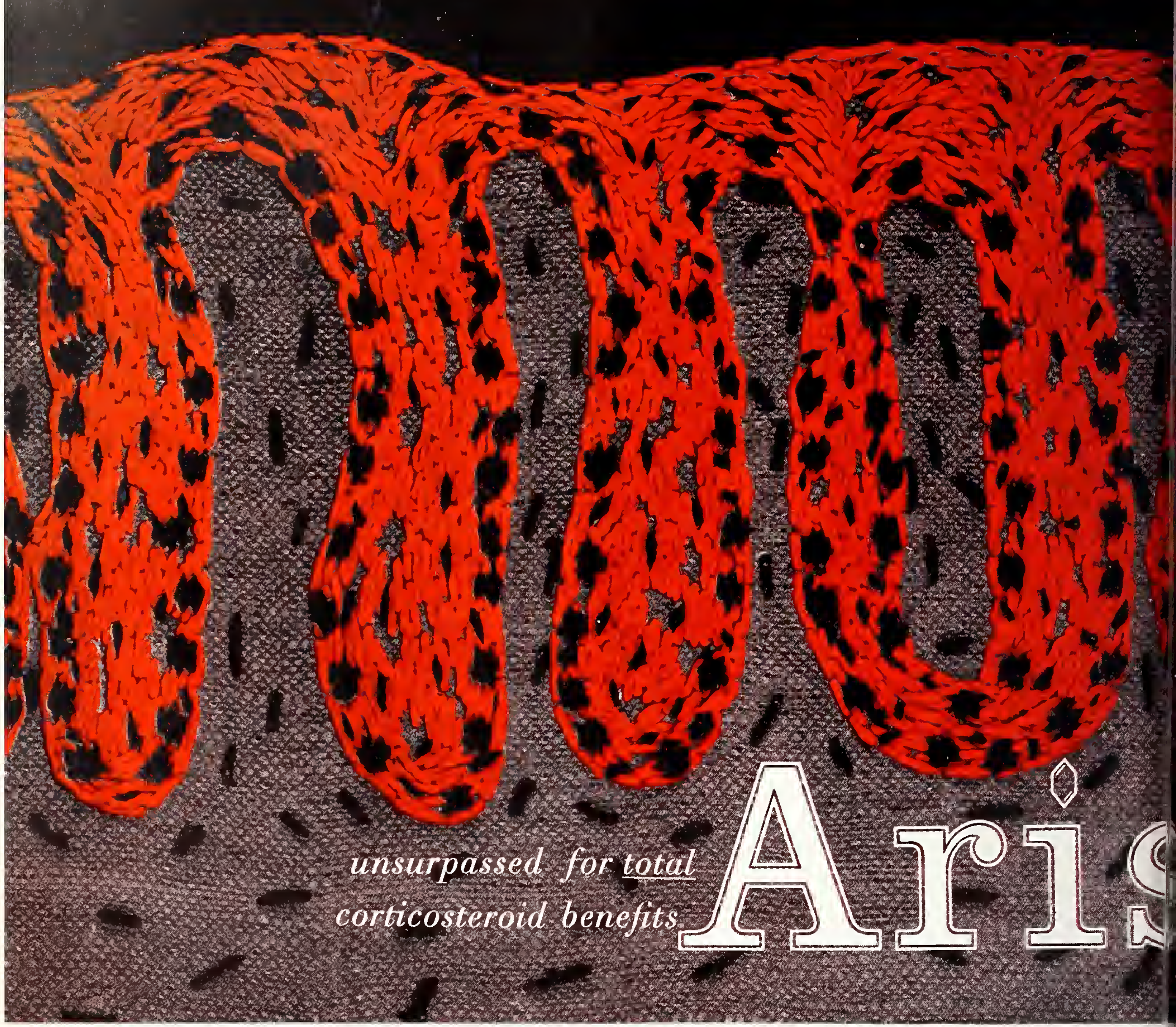
Past Presidents were introduced at the banquet.

EXECUTIVE SECRETARY'S REPORT

Mr. O'Brien presented the following report:

In this report I should like to try to bring into focus several issues of major importance that will concern the Council at this and future meetings and that will also concern the House of Delegates in March.

Though I have said this report will cover several issues, it would, perhaps, be more correct to say that they are all aspects of a single big, overriding issue. And that is the question: What is medicine in Missouri to do about the alarming indications that a very big step could be taken this year in the direction of national compulsory health insurance. This step would be to bring some in allergic and inflammatory skin disorders (including psoriasis

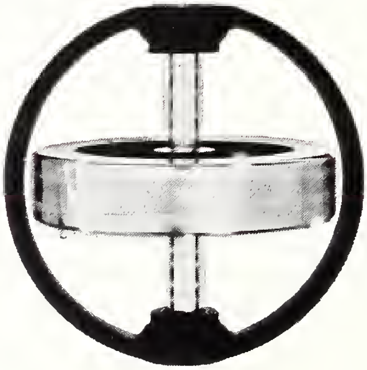


unsurpassed for total corticosteroid benefits

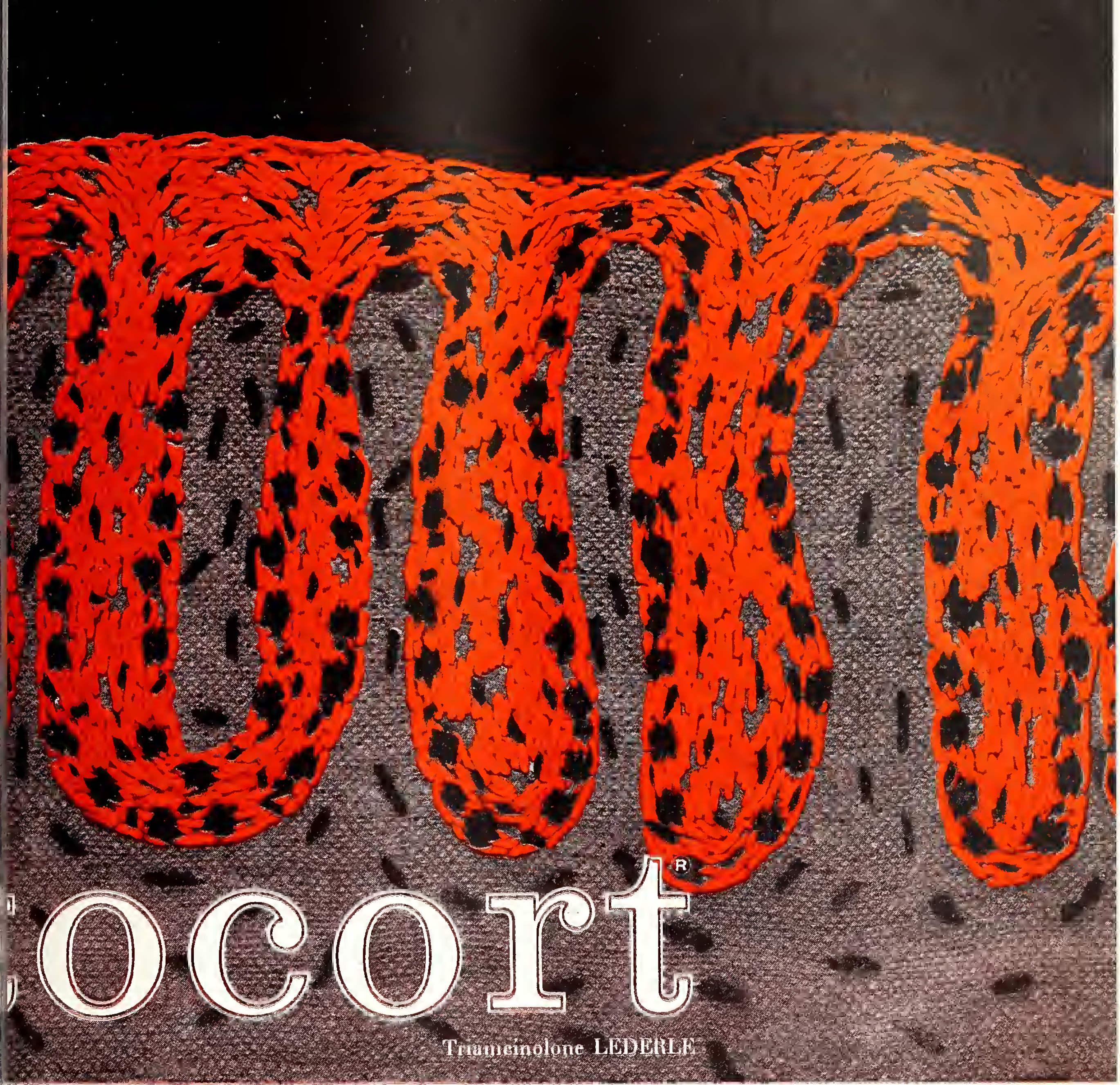
Aris

Substantiated by published reports of leading clinicians

- **effective control**
of allergic
and inflammatory
symptoms[1-3,7,8,12-15,17,18]



- **minimal disturbanc**
of the patient's
chemical and psychi
balance[1,4-18]



t the recommended antiallergic and anti-
flammatory dosage levels, ARISTOCORT means:

- freedom from salt and water retention
- virtual freedom from potassium depletion
- negligible calcium depletion
- euphoria and depression rare
- no voracious appetite — no excessive weight gain
- low incidence of peptic ulcer
- low incidence of osteoporosis with compression fracture

ecautions: With ARISTOCORT all traditional precautions to corticosteroid therapy ould be observed. Dosage should always be carefully adjusted to the smallest ount which will suppress symptoms.

fter patients have been on steroids for prolonged periods, discontinuance must be rried out gradually over a period of as much as several weeks.

pplied: 1 mg. scored tablets (yellow); 2 mg. scored tablets (pink); 4 mg. ored tablets (white); 16 mg. scored tablets (white).

iacetate Parenteral (for intra-articular and intrasynovial injection). Vials of cc. (25 mg./cc.).

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Lederle LEDERLE LABORATORIES, A Division of AMERICAN CYANAMID COMPANY, Pearl River, N. Y.

15 million people over age 65 into a more or less extensive program of Federal medical care.

We are all aware of the Forand Bill. There are now indications that the Republican administration in this election year may, on its own, propose something even less acceptable to medicine. A recent *Post-Dispatch* Editorial points up the possibility of such a development. A check I have made with the Washington office of the A.M.A. further confirms the possibility.

Our position against such Federal legislation has been based, even since Wagner-Murray-Dingell, on the proposition that voluntary pre-payment plans, and Blue Cross-Blue Shield in particular, are capable of doing the job that needs to be done, and the voluntary way is the best way.

In this connection, I think we may all be gratified at the recent anouncement of the "Blue Major" plan that St. Louis Blue Cross and Blue Shield are now offering to qualified groups after its initial introduction with Missouri employees of the Southwestern Bell Telephone Company.

I think you may also be interested in the text of a Blue Shield advertisement that will run in daily newspapers next week. It gives a summary description of other Blue Shield programs. These along with major medical, which we have just reviewed, add up to what I think we may rightfully call a respectable package of protection available to the public for groups of varying composition and for individuals without regard to age. I should report that the Blue Cross-Blue Shield Plans of Kansas City are developing a major medical program similar to the new St. Louis one, and it will be offered very shortly.

Dr. Hagemann gave a refresher course.

I think we must, however, recognize that our package does not completely satisfy some aspects of public demand for prepaid medical care protection. For example, the *Post-Dispatch* in its editorial following announcement of the "Blue Major" plan, had some comments to make. And there are indications that, within the profession, there is sentiment to do something more to bring us closer to offering what might be called complete protection—particularly for lower-income subscribers.

Now I want to emphasize that I am not recommending that we consider again a service program. That idea has been explored and rejected. I have, however, a letter addressed to the president by Dr. Daniel Sexton of the St. Louis Medical Society for the Missouri Society of Internal Medicine that makes a suggestion I think may interest the Council.

The essential problem before us, as I see it, is to define what new steps the medical profession in Missouri and nationally wants to take in sponsoring more complete voluntary programs of care. In this connection, we face not only the threat of Federal legislation, but also the growth of new panel plans like the Meatcutters' and others here. It is rumored, by the way, that the United Automobile Workers in this area are giving thought to setting up a program. If they should succeed in this, it could mean the loss of approximately 10 per cent of Blue Shield's present enrollment.

Dr. Wilson addressed alumni at the University of Missouri Medical Alumni banquet.

This last aspect of the problem is related to the report of our Special Committee on Corporate Practice, which will come before you at this meeting; so I shall not discuss it further.

Very simply, then, our concern at this meeting is to see what policy lines we can suggest for consideration of the House of Delegates in connection with what seems to me the most dangerous threat that has ever faced private and individual medical practice.

WOMAN'S AUXILIARY

On motion of Dr. Tillman, the following advisors to the Woman's Auxiliary for the year 1960, whom they had requested, were approved: Drs. Stanley S. Peterson, Springfield; R. O. Muether, St. Louis, and Louis H. Kohler, St. Louis.

MEDICAL SECRETARIES

A letter from the Missouri Society of Medical Secretaries and Assistants was read, asking advice about the formation of a new group. In discussion, it was decided that the only advice that could be given was to inform them of the by-laws of the Association in that only one society could be formed in a county.

FIELD SECRETARY'S REPORT

Mr. McIntyre gave the following report:

Some Field Secretary Activities since January 1, 1960:

1. Attended meetings as follows: January 3, Committee on Study of Councilor Districts in St. Louis; Jan. 5, St. Louis Medical Society Annual Officers Installation; Jan. 10, Maternal Welfare Committee in Jefferson City; Jan. 12, Ozarks Society at Monett; Jan. 13, St. Louis

County Installation; Jan. 14, West Central Society at Harrisonville; Jan. 17, Rural Health Committee and Medical Education and Hospitals Committee joint session; Jan. 19, Marion-Ralls-Shelby Society in Hannibal; Jan. 20, Joint session of Johnson, Henry, Pettis, Lafayette-Ray and Saline Societies at Marshall; Jan. 24, Missouri Academy of General Practice Board of Directors session; February 2, Committee revising PTA local Health Chairman's manual in Jefferson City.

2. Secured six speakers for medical society programs.

3. Revised list of suggested medical practice locations in Missouri (58 places listed).

4. Considerable correspondence with physicians seeking locations.

5. January 8—Trip to Viburnum (planned townsite) with Dr. Roebber of St. Joe Lead, Bonne Terre, as a requested (want doctor to move there).

6. New hospitals recently opened in rural Missouri—Aurora City Hospital (42 beds); Pershing Memorial Hospital at Brookfield (30 beds); Wright Memorial Hospital at Trenton opens its staff. (Twenty-four bed Cullers Hospital closed.)

7. New hospitals under construction—Cedar County at Eldorado Springs; Madison County at Fredericktown; Carroll County at Carrollton; Community Hospital at Sweet Springs; Bates County at Butler.

8. New hospitals or additions in planning stages—Smithville, Skaggs at Branson, Sikeston, Levering at Hannibal, Lincoln County, Sullivan, St. Vincent's at Monett, Bothwell at Sedalia, North Kansas City, Phelps County at Rolla and Howard County at Fayette.

Dr. Allen presented a case for a CPC.

Dr. Perry and Dr. Wilson spoke briefly about the meeting of the Rural Health Committee and the Medical Education and Hospitals Committee, pointing out that the main purpose of the meeting was to become better acquainted with the work at the University of Missouri Medical School. Dr. Perry pointed out that there were many things which were not understood by the committees, and therefore probably not by many doctors in the state. Dr. Wilson expressed appreciation for the opportunity to meet with committees and the Council and asked permission to bring problems to the Council at future times.

STUDENT LOAN FUND

In discussion it was brought out that a student loan fund would help in recruiting students and in holding students in school, and further their interest in locating in the state. Dr. Wilson discussed the student loan fund in Kansas. On motion of Dr. Perry, it was voted that the possibility of establishing a medical student loan fund be referred to a committee for study and later report to the Council.

IN QUEST OF HEALTH—THE HOSPITAL STORY

Messrs. Piper, Horsh and Holtz discussed "In Quest of Health—The Hospital Story" and said that it had been prompted by the poor public relations that hospitals have had. It was said that it also would promote interest in scientific careers and would help oppose socialized medicine, that the deemphasizing of doctors was not as great as the physicians felt. Mr. Piper said that it had been approved by the board of the hospital association. It was suggested by Mr. Holtz that some of the booklets could be rewritten.

Dr. Orr was the banquet speaker.

Following the presentation it was brought out in discussion that other states were also opposing the material; that it should be opposed on principle in that it was material placed in schools by a vested interest; that county societies should be alerted to contact their school boards. On motion of Dr. Furlow it was voted that the county medical societies be contacted and told that the program was not approved and that a revised analysis be sent them with the offer to lend them the material if they wished it. It was suggested that this information go to the Council on Medical Education of the A.M.A.

PHENYLKETONURIA

Dr. Hardwicke announced that work with retarded children was being carried out, attempting to locate younger siblings with phenylketonoria at a time that diet would prevent retardation, and that diets would be supplemented when necessary.

ANNUAL SESSION

Dr. Matthews reviewed the program of the annual session and told of the publicity that is being used in connection with the meeting. He said there would be a cocktail party for new members on Monday evening and that Councilors should be present. He said that next year it was hoped that the refresher courses could be given as breakfast sessions. He suggested that a questionnaire be given those in attendance to help get information as to the type of meeting the members desired. He asked that Councilors promote attendance from their districts.

TREASURER'S REPORT

Dr. Doyle presented the Treasurer's Report together with copies of the audit for 1959. The report was approved.

FITZGIBBON HOSPITAL

Dr. Barger reported that the Fitzgibbon Hospital staff in Marshall had asked advice on an osteopath who had a petition signed by 5,000 citizens promoting his appointment on the staff of the hospital. Mr. O'Brien said that the by-laws of the hospital and the will which established the hospital had been referred to legal counsel. Our attorney will supply an answer soon.

MR. BAKER

Mr. O'Brien introduced Mr. Martin Baker who is on loan to the A.M.A. from the Sedgwick (Kansas) County Medical Society for work with state associations on legislation. Mr. Baker outlined the A.M.A. wishes of state associations, principally that they get as many letters written to Congressmen as possible, and also as many resolutions as possible. He pointed out that the Forand Bill is another example of piece meal socialization, that it would cost far more than it is worth, and that the average person does not understand or know about it. He said that it is feared an amendment may be added to legislation dealing with social security that was already on the floor, though it is hoped that the Forand Bill will not get out of committee.

Drs. Bassett, Summers and Muether confer.

Resolution—The following resolution was read and on motion of Dr. Wimp, it was adopted for sending to legislators now and for presentation to the House of Delegates:

Whereas, House Resolution 4700, Eighty-Sixth Congress—sometimes known as the Forand Bill—would provide hospital, nursing home and surgical benefits for old age and survivors insurance beneficiaries under the social security act, and

Whereas, The Kennedy-Hart Bill has been introduced in the United States Senate with similar objectives and provisions, and other such legislation may yet be introduced, and

Whereas, Adoption of programs such as is proposed under the Forand and Kennedy-Hart bills must inevitably lead to extensions of such programs to others under the social security system, and eventually to the entire population, with consequent complete socialization of medicine in the United States, and

Whereas, Such programs, necessarily carrying with them governmental interference in the provision of medical service on a personal level, can lead only to a deterioration of the quality of medical care and of medical service to the people, and

Whereas, Such incalculably costly compulsory Federal programs will kill voluntary private efforts in providing health care protection programs which even now are adequate or soon will be adequate to care for the aging and the younger segments of the population, therefore be it

Resolved, That the Missouri State Medical Association registers its opposition to such proposals, and hereby respectfully urges the Congress not to pass House Resoultion No. 4700, the Forand Bill—the Kennedy-Hart Bill—or any similar legislation.

The stand of Missouri congressmen were reviewed but it was suggested that all receive letters whether for or against the bill.

Attention was called to a bill, uniform hazardous substances act, which had been introduced by Rep. Curtis. On motion of Dr. Barger, it was voted that a short resolution urging adoption of this measure go to congressmen. It was suggested that a similar measure might be introduced in Missouri.

Keogh Bill—On motion of Dr. Whitener, the following resolution was adopted for presentation to the House of Delegates:

Whereas, Present Federal income tax laws of the United States are discriminatory against self-employed persons in that they do not allow self-employed people the tax relief given to corporations and employees in deferring taxation of reasonable amounts of current income set aside for retirement programs, and

Whereas, House Resolution No. 10, Eighty-Sixth Congress—the Keogh Bill—would correct this manifest inequity, and

Whereas, The medical profession traditionally has believed in support for the efforts of individuals to provide for their own needs, and

Whereas, The members of the medical profession in Missouri, largely self-employed practicing physicians, have a direct and important interest in this attempt to help the self-employed provide for their own security in retirement, therefore be it

Resolved, That the Missouri State Medical Association go on record in support of House Resolution No. 10, and hereby respectfully urges the Congress to pass this needed legislation.

MEDICARE

Mr. O'Brien made a report on Medicare in Missouri and read a letter from the General Accounting Office of the Government which states in part:

"In our opinion the contractors were adequately discharging their responsibilities relating to the administration of the contract in accordance with its terms. The following finding relates to the high percentage of physicians' claims for maximum allowable fees and is primarily for consideration by the Surgeon General, Department of the Army.

"A very high percentage of claims submitted by Missouri physicians were for the maximum amounts allowable under the fee schedule. This situation may be due in part to the fact that schedules of maximum allowances were furnished Missouri physicians, even though in the Manual furnished with the schedules there is a statement that 'It is expected that physicians will bill the Government their normal charges for persons with incomes of $4,500 when such charges are less than the stated maximum allowances.'

"We have no evidence that the amounts of the claims exceed the normal fees charged by the physicians; however, in certain other states where fee schedules were not distributed a high percentage of physicians' claims were in amounts that were less than the maximum allowable fees. The possibility exists that many Missouri physicians may not understand that the fees in the schedule represent the maximum allowable, and that they are expected to bill for their normal charges when less than the maximum."

The letter was transmitted to the Association by General Wergeland, Executive Director of the Medicare Program.

We have reported to General Wergeland that the Missouri Manual and other publications relating to Medicare have stressed that physicians should charge their usual fees or the manual schedule whichever is lower.

It was reported that almost 25,000 Medicare cases had been handled in Missouri since the inception of the program. About 600 of these were referred to the State Medicare Committee for evaluation and recommendation.

On motion of Dr. Dowell, it was voted to express appreciation to the Committee for its work.

The Council held meetings during the year.

CORPORATE PRACTICE

Dr. Muether presented the report of the special Committee on Corporate Practice, which on motion was adopted for submission to the House of Delegates.

RELATIVE VALUE SURVEY

The possibility of having a relative value study made, possibly by the Committee on Medical Economics, was discussed. The letter from Dr. Sexton, stating that the Missouri Society of Internal Medicine had made such a survey relating to Internal Medicine, was read. It was pointed out that the A.M.A. had offered to help any state which wishes to make such a survey. It was suggested that Dr. Furlow discuss the matter with Dr. Sexton and that the St. Louis delegation might wish to introduce this in the House.

LETTER TO DR. HARDWICKE

The work that Dr. Hardwicke had done with the Task Force for the White House Conference on Aging, and his general attitude toward the medical profession were complimented and it was suggested that a letter of thanks go to him.

HANDBOOK

Materials to go in the Handbook for Delegates was reviewed, including the report on corporate practice, the resolutions on the Forand and Keogh bills, the transactions of this meeting of the Council, and the report of the special committee on redistricting.

The Speaker referred this portion of the report of the Council to the Reference Committee on Reports of Officers.

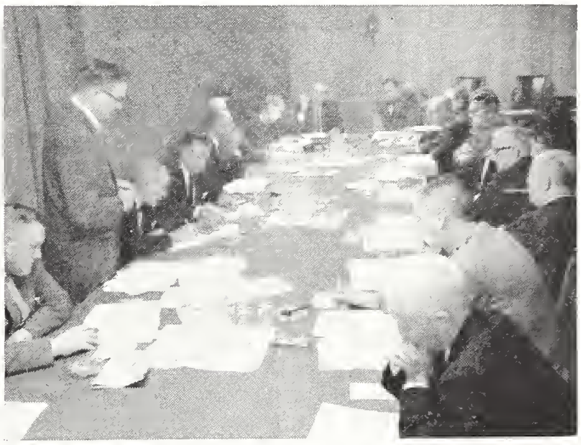
Dr. Summers: It has been called to the attention of the Council by The Ovid Bell Press, Inc., which prints MISSOURI MEDICINE, that Section 132.23 E. Postal Manual, specifies that publications carrying advertising must be limited in circulation to "copies mailed to members who pay either as a part of their dues or assessments, or otherwise, not less than 50 per cent of the regular subscription price to other actual subscribers, to exchanges, and 10 per cent of such circulation as sample copies."

The subscription price of MISSOURI MEDICINE is $3.00 and the By-Laws, Chapter VIII, Sec. 2, states: "One dollar of the annual dues shall be credited to the account of The Journal for each member's annual subscription. The remainder of the amount shall be credited to the general fund of the Association."

Since MISSOURI MEDICINE has been self-sustaining since 1954, finances are actually not involved, but it is important that we conform to postal regulations.

Therefore the Council recommends the following amendment to the By-Laws: Amend Chapter VIII, Sec. 2, by deleting the first sentence which reads: "One dollar of the annual dues shall be credited to the account of The Journal for each member's annual subscription," and by inserting in lieu thereof the following: "Sec. 2. One and one half dollars of the annual dues shall be credited to the account of The Journal for each member's annual subscription."

Since the American Medical Association and many state associations are using the term "Disaster Medical Care" rather than "Civil Defense" and since such work is better described presently by the first term, it is recommended that the By-Laws be amended by deleting from Chapter VII. Committees, Sec. 2, the words "A Committee on Civil Defense," and inserting in lieu thereof the words "A Committee on Disaster Medical Care," in the listing of committees. Also in Chapter VII. Committees, Sec. 2, the paragraph dealing with the duties of the Committee on Civil Defense be deleted and the following using the new term for the Committee be inserted in lieu thereof: "The Committee on Disaster Medical Care shall consist of ten members of the Association, appointed annually by the President, one from each of the ten Councilor Districts, and, in addition, any other members who are interested in the medical aspects of disaster medical care; the Committee shall concern itself with the development of disaster medical care operations in the state and shall cooperate



Dr. Matthews reported on the program to the Council.

with public officials and private organizations in the furtherance of disaster medical care activities."

The Speaker referred the supplemental report of the Council to the Reference Committee on Amendments to the Constitution and By-Laws.

Following recommendation of the Council that a report from the Woman's Auxiliary be presented to the House of Delegates, the Speaker asked permission of the House and Mrs. Stanlty S. Peterson, Springfield, President of the Woman's Auxiliary of the Missouri State Medical Association, spoke as follows:

REPORT OF THE WOMAN'S AUXILIARY

In the name of the Auxiliary, I want to thank you for this opportunity to tell you what the Auxiliary has been doing this year. Every place I have gone this year I have tried to impress upon our members that we are a group of friendly women with common interests, working together for the betterment of the community's health and safety.

Our state membership is 1,739. We are members because we want to be part of the team that knows what is going on in organized medicine today. One of our main projects this year has been raising funds for the American Medical Education Foundation. So far this year, as of February 15, we have turned over $2,765.92 to the Foundation. There will be more donations before the end of the year. These represent personal gifts, Auxiliary donations, memorial donations and funds obtained through money making propositions. We are interested also in recruiting young people for medical careers. Fifteen of our Auxiliaries maintain loan or scholarship funds for nurses. Our state Auxiliary maintains a medical student's loan fund. We have $7,974 outstanding in loans, and in our fund we have $4,067 available to be loaned.

Mrs. Peterson, Woman's Auxiliary President, addressed the House.

Although the sale of *Today's Health* is no longer one of our Auxiliary projects, we still urge members to subscribe personally and the Auxiliary has given gift subscriptions to libraries, schools, legislators and so forth.

A special effort has been made this year to acquaint our members with the provisions of the Forand Bill, and to encourage them to write their representatives in opposition to this bill as requested by the A.M.A. A table has been set up near your registration desk and during this convention Auxiliary members will be at that table to assist you in writing letters to your congressmen about this bill. After you have written this letter, you will receive one of these white ribbons, and anyone who does not have a ribbon by Tuesday will be most conspicuous.

To guide us in planning our activities for the year and help us evaluate the work we have done, we use the point system. At our Tuesday noon luncheon a gold cup will be awarded to the Auxiliary with the most outstanding record for the year. Jasper County has held the cup for two years. Pettis and Cole counties are also winners of the cup. I am sorry that I cannot tell you now who the winner is for this year.

Community service has also been one of our primary interests and I wish I could tell you in detail of the many activities and organizations in their communities in which doctors' wives have been leaders and workers. Nearly all have helped with their local Community Chest and Health Fund drive. Others work in Red Cross, Cancer, Mental Health, Safety, their churches, their P.T.A.'s, the hospital auxiliaries and civic clubs. We wish to thank our county medical societies for their encouragement and support and also the Missouri State Medical Association. We thank the Association, too, for printing our *Quarterly Bulletin*, for appropriating funds for our convention and for providing space for our archives in the state office. We wish to thank our advisors for this year, Dr. Ralph Perry, Dr. W. W. Tillman, and Dr. Henry Bauman, for their help. Please remember that one of the reasons for the Auxiliary is to assist you in your projects. Please call on us when we can help you.

Refresher courses ran concurrently.

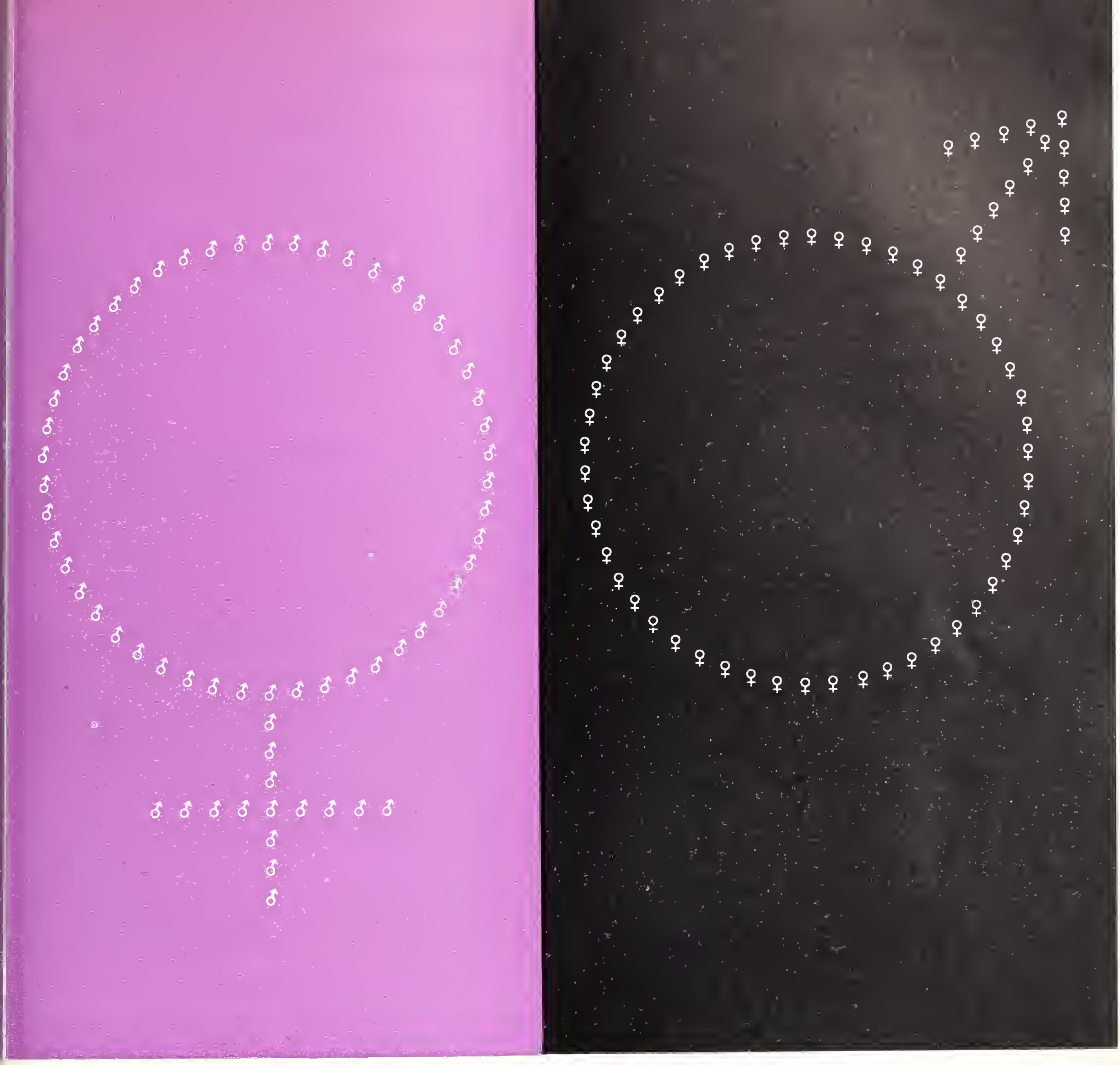
It is a privilege this year to have our National President, Mrs. Frank Gastineau, and the President of the Auxiliary to the Southern Medical Association as our convention guests. These charming ladies will be at the buffet supper tonight and I hope you will all have an opportunity to meet them.

Thank you again for giving me this opportunity to tell you what the Auxiliary has been doing.

Ralph Perry, M.D., Kansas City, President, announced the Committee on Nominations as follows:

Committee on Nominations

John R. Dixon, M.D., Brookfield.
Avery P. Rowlette, M.D., Moberly.
Paul F. Max, M.D., St. Louis.



GONORRHEA IS ON THE MARCH AGAIN...

a new timetable for recovery:

only six capsules of TETREX can cure a male patient with gonorrhea in *just one day**

Tetrex®

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THE ORIGINAL TETRACYCLINE PHOSPHATE COMPLEX

TETREX CAPSULES. 250 mg. Each capsule contains: TETREX (tetracycline phosphate complex equivalent to tetracycline HCl activity) – 250 mg.

DOSAGE: Gonorrhea in the male – Six capsules of TETREX in 3 divided doses, in one day.

*Marmell, M., and Prigot, A.: Tetracycline phosphate complex in the treatment of acute gonococcal urethritis in men. Antibiotic Med. & Clin. Ther. 6:108 (Feb.) 1959.

BRISTOL

BRISTOL LABORATORIES,
SYRACUSE, NEW YORK

Joseph B. Kendis, M.D., St. Louis.
William J. Shaw, M.D., Fayette.
David S. Long, M.D., Harrisonville.
Frederick J. McCoy, M.D., Kansas City, Chairman.
F. L. Wommack, M.D., Crane.
H. W. Carrington, M.D., Lebanon.
Fred J. Biggs, M.D., Poplar Bluff.

Henry C. Allen, M.D., St. Louis: Mr. Speaker, I have a resolution to offer as follows:

Whereas, The House of Delegates of the MSMA has on previous occasions deplored the archaic Coroner's System that exists in the State of Missouri, and

Whereas, The House of Delegates of the MSMA has previously recommended the substitution of a Medical Examiners' System for the Coroners' System in the State of Missouri, and

Whereas, To that extent the Council of the MSMA approved a Medical Examiner law which was introduced into the 1955 Legislature, and

Whereas, Due to more urgent legislation pending at that time the Council of the MSMA was not able to give this bill active support and

Whereas, The deplorable situation covering the investigation of violent deaths occurring in the State of Missouri under the Coroners' System still exists, therefore be it

Resolved, That the 1960 House of Delegates reaffirms its approval of the establishment of a Medical Examiners' System and be it further

Resolved, That the House of Delegates instructs the Council of the MSMA to

(1) formulate an appropriate law which would establish a Medical Examiners' System and

(2) take appropriate steps to see that such a law is introduced into the Legislature as soon as possible and

(3) to actively support the passage of such legislation.

The Speaker referred this resolution to the Reference Committee on Resolutions.

Frederick J. McCoy, M.D., Kansas City: Mr. Speaker, I would like to present the following resolution:

Whereas, There are duplications as indicated by the attached forms on hospital records, which are required under the regulations of the Joint Commission on Accreditation of Hospitals, that necessitate redundant and duplication procedures by staff physicians, and

Whereas, An investigation study to ascertain wherein these circumstances exist and the adoption of indicated revisions in the regulations by the Commission would be welcomed and beneficial to the staff physicians, therefore be it

Resolved, That this House of Delegates instruct its Delegates to the House of Delegates of the American Medical Association to introduce a resolution that will express to the Joint Commission on Accreditation of Hospitals, our physician members' sincere objection to unnecessary and redundant duplications of informational procedures which appear on the prescribed forms for hospital use, and be it further

Resolved, That the Joint Commission on Accreditation of Hospitals be urged to promptly conduct a national study to evaluate the efficiency of present hospital records which are required to be executed by physicians, with the objective and purpose of eliminating all nonessential duplications in hospital records.

The Speaker referred this resolution to the Reference Committee on Resolutions.

James R. Meador, M.D., St. Louis: Mr. Speaker, I wish to present the following resolution:

Whereas, The Speaker and Vice Speaker of the House of Delegates of the Missouri State Medical Association are elected at the closing session of one Annual Meeting to serve at the next Annual Meeting according to Chapter IV, Section 2, and

Whereas, In order to serve in these capacities at the next Annual Meeting, the elected Speaker and Vice Speaker must be duly elected delegates from their respective county societies, and

Whereas, Failure of election of these officers by their respective societies would deprive the House of Delegates of its experienced officers who were selected by the House and thereby handicap its function, therefore be it

Resolved, That Article IV of the Constitution of the Missouri State Medical Association be amended by adding at the end of the second sentence the words "at one Annual Meeting to serve at the next as delegates-at-large," and be it further

Resolved, That the By-Laws be amended by adding a new sentence at the end of Section 2, Chapter III to read "The Speaker and Vice Speaker of the House of Delegates shall serve as delegates-at-large and shall not be considered as delegates from their respective county societies."

The Speaker referred this resolution to the Reference Committee on Amendments to the Constitution and By-Laws.

John P. Ferguson, M.D., Springfield: Mr. Speaker, I wish to present the following resolution for the Greene County Medical Society:

Whereas, House Resolution 4700, Eighty-Sixth Congress—sometimes known as the Forand Bill—would provide hospital, nursing home and surgical benefits for old age and survivors insurance beneficiaries under the Social Security Act, and

Whereas, The Kennedy-Hart Bill has been introduced in the United States Senate with similar objectives and provisions, and other such legislation may yet be introduced, and

Whereas, Such programs will lead to the complete socialization of medicine in the United States resulting in the deterioration of the quality of medical care and of medical service to the people of this country, and

Whereas, Such incalculably costly compulsory federal programs will kill voluntary private efforts in providing health care protection programs which are showing tremendous growth each year, and

Whereas, The American Nursing Association has gone on record in support of Forand and similar type legislation, therefore be it

Resolved, That this House of Delegates urge Missouri physicians to contact district nursing associations and members of the Board of the Missouri State Nursing Association urging active opposition to the Forand Bill and similar legislation supported by the American Nursing Association.

The Speaker referred this resolution and the resolution by the Council dealing with such legislation to the Reference Committee on Resolutions.

The Past Presidents' banquet was held Tuesday evening.

It was announced that Representative Bruce Alger, who was to have been the Annual Banquet speaker, was remaining in Washington, D. C., because of legislative activity.

After unanimous consent, on motion of Dr. George L. Hawkins, duly seconded, the House of Delegates voted to send Mr. Alger a telegram regretting his inability to be at the session but commending him on his decision to remain in Washington.

The Speaker declared the session recessed at 2:55 p.m.

Monday, March 14, 1960

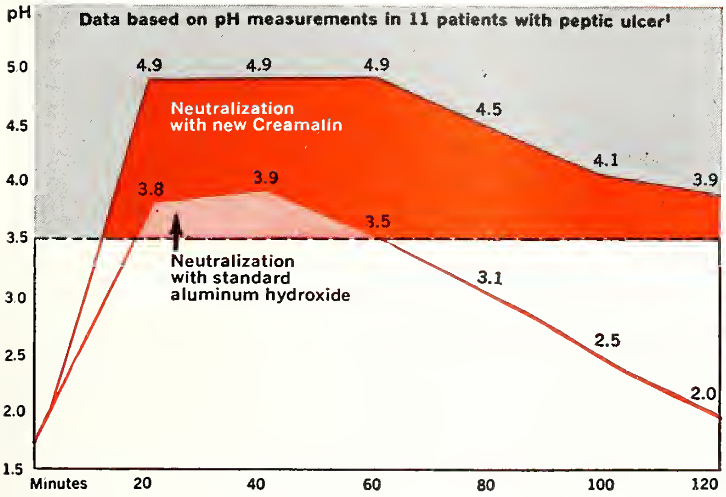
The House of Delegates convened at 4:45 p.m. in the Crystal Room, Sheraton-Jefferson Hotel, St. Louis, with Oscar P. Hampton, M.D., University City, Speaker, presiding.

Robert B. Bassett, M.D., St. Louis, reported for the Committee on Credentials.

Dr. Arthur W. Neilson, St. Louis, reported for the Reference Committee on Amendments to the Constitution and By-Laws.

At the site of peptic ulcer

Following determination of basal secretion, intragastric pH was continuously determined by means of frequent readings over a two-hour period.



neutralization is much faster and twice as long with

New CREAMALIN® ANTACID TABLETS

New proof in vivo[1] of the much greater efficacy of new Creamalin tablets over standard aluminum hydroxide has now been obtained. Results of comparative tests on patients with peptic ulcer, measured by an intragastric pH electrode, show that new Creamalin neutralizes acid from 40 to 65 per cent faster than the standard preparation. This neutralization (pH 3.5 or above) is maintained for approximately one hour longer.

New Creamalin provides virtually the same effects as a liquid antacid[2] with the convenience of a tablet.

Nonconstipating and pleasant-tasting, new Creamalin antacid tablets will not produce "acid rebound" or alkalosis.

Each new Creamalin antacid tablet contains 320 mg. of specially processed, highly reactive, short polymer dried aluminum hydroxide gel (stabilized with hexitol) with 75 mg. of magnesium hydroxide. Minute particles of the powder offer a vastly increased surface area for quicker and more complete acid neutralization.

Dosage: Gastric hyperacidity—from 2 to 4 tablets as necessary. Peptic ulcer or gastritis—from 2 to 4 tablets every two to four hours. Tablets may be chewed, swallowed whole with water or milk, or allowed to dissolve in the mouth. How supplied: Bottles of 50, 100, 200 and 1000.

[1] Data in the files of the Department of Medical Research, Winthrop Laboratories. [2] Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: J. Am. Pharm. A. (Scient. Ed.) 48:384, July, 1959.

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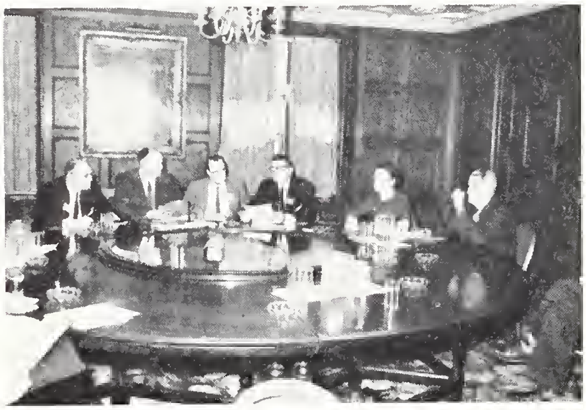
for peptic ulcer ■ gastritis ■ gastric hyperacidity

REPORT OF THE REFERENCE COMMITTEE ON AMENDMENTS TO THE CONSTITUTION AND BY-LAWS

The Reference Committee on Amendments to the Constitution and By-Laws met at 3:45 p.m. on March 13. The following members were present: Drs. Philip L. Byers, Reinhardt D. Dwyer, M. T. English, Claude W. Cooper, and Arthur W. Neilson, Chairman.



Dr. Neilson was chairman of the Reference Committee on Constitution and By-laws.

In addition to the report of the Special Committee on Redistricting which appeared in the Handbook, a number of items were presented to the Committee for study. A suggested resolution was introduced by the St. Louis County Medical Society. This resolution would retain the same number of Councilor Districts which we have at the present time but would transfer Jefferson County to District 10 and leave St. Louis and St. Charles Counties as District 4. After a great deal of discussion it was brought out that District 5 did not wish to accept Lincoln, Warren-Gasconade-Franklin counties by reason of over-enlargement of this district and the increased burden to the Councilor. It was pointed out by testimony that there were other inequalities in many of the Councilor Districts and, indeed, the entire representation set-up as presently provided by the present Constitution and By-Laws seemed faulty. It was this Committee's conclusion that the entire matter of representation, both urban and rural, be thoroughly studied by a special continuing committee. It is this Committee's opinion that this study cannot thoroughly be accomplished in just a few sessions and that the answers to these problems will come only through the hard, dedicated work of the special committee. This Committee recognizes that a continuing or standing committee cannot be appointed without by-law change. Therefore, the Committee recommends that the report of the Special Committee on Redistricting not be adopted and that the President appoint a new committee to continue this study this year and that consideration by given for by-law changes enabling a standing committee to be formed for these purposes. A full report and suggested changes should be available to the House of Delegates after the completion of the study and the resulting solution.

It seems to this Reference Committee that the entire problem has been inadequately studied heretofore and that a great deal more time, effort and energy will have to be expended on this problem before a plan for equitable representation can be achieved.

Mr. Speaker, I move the adoption of this portion of the report.

Upon second, this portion of the report was adopted.

Another suggested amendment which was brought to the attention of the Committee concerned the Committee on Fractures as presently constituted.

It was brought out by testimony that in order to conform with the Committee title as used by the American College of Surgery, the Committee on Fractures has recommended that the name be changed to "Committee on Trauma." This has been approved by the Council.

The Reference Committee on Constitution and By-Laws therefore recommends that the By-Laws be amended by deleting from Chapter VII. Committees, Sec. 2, the words "A Committee on Fractures" and inserting in lieu thereof the words "A Committee on Trauma." Also in Chapter VII. Committees, Sec. 2, the paragraph dealing with the work of the Committee should be deleted and the following inserted in lieu thereof: "The Committee on Trauma shall disseminate information regarding the current and approved methods of handling trauma and stimulate interest therein, such information to be disseminated to licensed practitioners of medicine and to lay groups approved by the Committee. It shall correlate its programs with those of the Committee on Scientific and Postgraduate work."

Mr. Speaker, I move the adoption of this portion of the report.

Upon second, this portion of the report was adopted.

Another suggested committee name change which was brought to the attention of the Reference Committee on Constitution and By-Laws was a change of the words "Disaster Medical Care" rather than "Civil Defense."

The Committee felt it was unwise to completely divorce this committee from the idea of its being related to the federal office of Civilian Defense and from the connotation of civil defense, namely the necessity of all ancillary services within a community in coping with disaster of any character.

Drs. Hampton, Tillman and Barger discuss a problem.

The Committee recommends, therefore, that since the American Medical Association and many state associations are using the term "Disaster Medical Care" rather than "Civil Defense," it is recommended that the By-Laws be amended to contain both these terms for this committee by deleting from Chapter VII. Committees,

ONE ***and only*** **ONE**

Timed **AMO*dex*** **CAPSULE**

PER

DAY ***will economically***

control appetite in weight reduction or relieve the nervous symptoms of anxiety and the underlying depression.

6-10 HOURS SUSTAINED THERAPY

Timed AMO*dex* *CAPSULES* (Testagar) furnish a controlled uniform action. The medications provide prolonged, continuous therapeutic effect from active ingredients over a period of 6 to 10 hours.

Following ingestion of one *Timed* AMO*dex* *CAPSULE*, small amounts of the medication are released immediately.

Each *Timed* AMO*dex* *CAPSULE* contains a daily therapeutic dose of:

Dextro-amphetamine hydrochloride	15 mg.,
Amobarbital	60 mg.

PROTRACTED THERAPEUTIC EFFECT

Before the development of *Timed* AMO*dex* (Testagar) the usual dose of Dextro-amphetamine hydrochloride, for the control of appetite, was one 5 mg. tablet two or three times a day. The usual dose of Amobarbital ranged from 20 to 40 mg., two or three times a day. On such a dosage regimen the absorption of the drugs, after ingestion, takes place quite rapidly. The therapeutic activity occurs within one-half to one hour. When the therapeutic peak is reached, a gradual decline takes place. At this point, the patient should receive another dose of medication . . . the cycle is then repeated.

Patients frequently fail to follow the physician's instructions. They take medication at irregular intervals. When this occurs with drugs such as dextro-amphetamine sulfate, phosphate or hydrochloride, excitation may result. A balanced combination of Dextro-amphetamine hydrochloride, **the preferred salt,** plus a balanced daily dose of Amobarbital will give the expected therapeutic results *without* excitation.

Timed AMO*dex*, after ingestion, releases Dextro-amphetamine Hydrochloride and Amobarbital steadily and uniformly over a period of 6 to 10 hours. Therefore, the physician may dispense with the usual dosage schedule thereby *attaining better control of therapy*. The patient will receive the benefits of even and sustained therapeutic effects. Side reactions such as anxiety and excitation are greatly minimized.

AMO*dex* ADVANTAGES

- HIGH-LEVEL ANOREXIGENIC ACTIVITY WITHOUT NERVOUS EXCITATION
- SMOOTH, UNIFORM ACTION
- THERAPEUTIC EFFECT LASTING 6 TO 10 HOURS
- ONLY ONE DOSE DAILY
- CLINICALLY ECONOMICAL TO THE PATIENT

ACTION AND USES

Timed AMO*dex* *CAPSULES* (Testagar) supply the antidepressant and mood-elevating effects of Dextro-amphetamine hydrochloride and the calming action of Amobarbital. *Timed* AMO*dex* elevates the mood, relieves nervous tension, restores emotional stability and the capacity for mental and physical effort.

INDICATIONS

Timed AMO*dex* is the preferred treatment in anxiety states and in the management of obesity. *Timed* AMO*dex* may also be used in the treatment of Depressive states, Alcoholism, Nausea and Vomiting of Pregnancy.

DOSAGE The Daily Dose of *Timed* AMO*dex* (Testagar) IS ONE CAPSULE ON ARISING OR AT BREAKFAST.

SUPPLIED Bottles of 100 and 1000 capsules, available at all pharmacies. Also supplied in half strength as *Timed* AMO*dex*, Jr.

Timed AMO*dex* *CAPSULES* are manufactured under these patent numbers:
2,736,682 – 2,809,916
2,809,917 – 2,809,918
Which provide prolonged, continuous therapeutic effect over a period of 6-10 hours

SAMPLES AND LITERATURE UPON REQUEST

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Section 2, the words "A Committee on Civil Defense" and inserting in lieu thereof the words "A Committee on Civil Defense Disaster Medical Care." Also in Chapter VII. Committees, Sec. 2, the paragraph dealing with the duties of the Committee on Civil Defense be deleted and the following using the new term for the committee be inserted in lieu thereof: The Committee on Civil Defense Disaster Medical Care shall consist of ten members of the Association, appointed annually by the President, one from each of the ten Councilor districts, and, in addition, any other members who are interested in the medical aspects of disaster medical care; the Committee shall concern itself with the development of disaster medical care operations in the state and shall cooperate with public officials and private organizations in the furtherance of disaster medical care activities."

Mr. Speaker, I move the adoption of this portion of the report.

Upon second, this portion of the report was adopted.

It was further brought to the attention of the Reference Committee on Constitution and By-Laws that Section 132.23 E, Postal Manual, specifies that publications carrying advertising must be limited in circulation to "copies mailed to members who pay either as a part of their dues or assessments, or otherwise, not less than 50 per cent of the regular subscription price to other actual subscribers, to exchanges, and 10 per cent of such circulation as sample copies."

The subscription price of Missouri Medicine is $3 and the By-Laws, Chapter VIII, Sec. 2, states: "One dollar of the annual dues shall be credited to the account of The Journal for each member's annual subscription, The remainder of the amount shall be credited to the general fund of the Association."

Dr. Sexton addressed a reference committee.

Since Missouri Medicine has been self-supporting since 1954, finances are actually not involved, but it is important that we conform to postal regulations.

Therefore, the Council recommends the following amendment to the By-Laws: Amend Chapter VIII, Sec. 2, by deleting the first sentence which reads: "One dollar of the annual dues shall be credited to the account of The Journal for each member's annual subscription," and by inserting in lieu thereof the following: "Sec. 2. One and one half dollars of the annual dues shall be credited to the account of The Journal for each member's annual subscription."

The Reference Committee on Constitution and By-Laws unanimously approved this resolution.

Mr. Chairman, we move the acceptance of this portion of the report.

Upon second, this portion of the report was adopted.

Another resolution which was presented to this Committee had to do with the election of the Speaker and Vice Speaker of the House of Delegates of the Missouri State Medical Association. The resolution reads as follows:

Whereas, The Speaker and Vice Speaker of the House of Delegates of the Missouri State Medical Association are elected at the closing session of one annual meeting to serve at the next annual meeting according to Chapter IV, Section 2, and

Whereas, In order to serve in these capacities at the next annual meeting, the elected Speaker and Vice Speaker must be duly elected delegates from their respective county societies, and

Whereas, Failure of election of these officers by their respective societies would deprive the House of Delegates of its experienced officers, who were selected and elected by the House, and thereby handicap its function, therefore be it

Resolved, That Article IV of the Constitution of the Missouri State Medical Association be amended by adding at the end of the second sentence the words "at one annual meeting to serve at the next as delegates-at-large," and be it further

Resolved, That the By-Laws be amended by adding a new sentence at the end of Section 2, Chapter III to read "The Speaker and Vice Speaker of the House of Delegates shall serve as delegates-at-large and shall not be considered as delegates from their respective county societies."

After due consideration of the testimony, your Committee agreed that the resolution should not be adopted since it does not rectify the problem as it presently exists, and suggests that the matter be studied by the Council and with advice from its legal department.

Mr. Speaker, I move this portion of the report be adopted.

Upon second, this portion of the report was adopted.

Mr. Speaker, I move that the report as a whole be adopted.

Upon second, the report as a whole was adopted.

The Speaker pointed out that the three proposed amendments would lie on the table for action at the Wednesday session.

Dr. John F. Bowser, Kansas City, gave the report of the Reference Committee on Resolutions.

REPORT OF THE REFERENCE COMMITTEE ON RESOLUTIONS

The Reference Committee on Resolutions met on Sunday, March 13, at 4:30 p.m. with the following present: Drs. J. Loren Washburn, Robert Kingsland, Herbert C. Wiegand, Forrest C. Long, and John F. Bowser, Chairman.

The Committee unanimously recommended adoption of the following:

Resolution

Whereas, The House of Delegates of the MSMA has on previous occasions deplored the Archaic Coroner System that exists in the State of Missouri and,

Whereas, The House of Delegates, of the MSMA has previously recommended the substitution of a Medical Examiner System for the Coroners System in the State of Missouri and,

Whereas, To that extent the Council of the MSMA approved a Medical Examiner Law which was introduced into the 1955 Legislature and,

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1. Projection from Vital Statistics, U.S. Government Dept. HEW, Vol. 48, No. 14, 1958, p. 398.
2. Modell, W.: Drugs of Choice 1958-1959, St. Louis, C. V. Mosby Company, 1958, p. 347.

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Whereas, Due to more urgent legislation pending at that time the Council of the MSMA was not able to give this Bill active support and,

Whereas, The deplorable situation covering the investigation of violent deaths occurring in the State of Missouri under the Coroners System still exists, therefore be it

Resolved, That the 1960 House of Delegates reaffirm its approval of the establishment of a Medical Examiners System and be it further

Resolved, That the House of Delegates recommend to Council of the MSMA that they:

(1) Formulate an appropriate law which would establish a Medical Examiners System and

(2) Take appropriate steps to see that such a law is introduced into the Legislature as soon as possible and

(3) Actively support the passage of such legislation.

Upon motion, duly seconded, this portion of the report was adopted.

Resolution

To request the Joint Commission on Accreditation of Hospitals to conduct a national efficiency study to achieve an elimination of unnecessary duplication in hospital records, introduced by Delegates from Jackson County Medical Society by request.

Dr. Bowser was chairman of the Reference Committee on Resolutions.

Whereas, Certain duplication on hospital records are required under the regulations of the Joint Commission on Accreditation of Hospitals, necessitating duplication procedures by staff physicians and

Whereas, An investigation study to ascertain wherein these circumstances exist and the adoption of indicated revisions in the regulations by the Commission, would be welcomed and beneficial to the staff physicians, therefore be it

Resolved, That this Association instruct its Delegates to the American Medical Association, to introduce a Resolution that will express to the Joint Commission on Accreditation of Hospitals, our physician members' sincere objection to unnecessary repetition of information on hospital records, and be it further

Resolved, That the Joint Commission on Accreditation of Hospitals be urged to promptly conduct a national study to evaluate the efficiency of present hospital records which are required to be executed by physicians, with the objective and purpose of eliminating all non-essential duplications in hospital records.

Upon motion, duly seconded, this portion of the report was adopted.

Resolution

Whereas, House Resolution 4700, Eighty-Sixth Congress—sometimes known as the Forand Bill—would provide hospital, nursing home and surgical benefits for old age and survivors insurance beneficiaries under the Social Security Act, and

Whereas, The Kennedy-Hart Bill has been introduced in the United States Senate with similar objectives and provisions, and other such legislation may yet be introduced, and

Whereas, Adoption of programs such as is proposed under the Forand and Kennedy-Hart Bills must inevitably lead to extensions of such programs to others under the Social Security System, and eventually to the entire population, with consequent complete socialization of medicine in the United States, and

Whereas, Such programs, necessarily carrying with them governmental interference in the provision of medical service on a personal level, can lead only to a deterioration of the quality of medical care and of medical service to the people, and

Whereas, Such incalculably costly compulsory Federal programs will kill voluntary private efforts in providing health care protection programs which even now are adequate or soon will be adequate to care for the aging and the younger segments of the population, therefore be it

Resolved, That the Missouri State Medical Association registers its opposition to such proposals, and hereby respectfully urges the Congress NOT to pass House Resolution No. 4700, the Forand Bill—the Kennedy-Hart Bill—or any similar legislation and that the Senators and Representatives from the State of Missouri be so informed, and therefore be it further

Resolved, That the Missouri State Medical Association commend the efforts of the Blue Cross, Blue Shield and other voluntary insurance programs throughout the United States to provide adequate Medical coverage for the aged.

Upon motion, duly seconded, this portion of the report was adopted.

Upon motion, duly seconded, the report as a whole was adopted.

Dr. Emmett B. Drescher, St. Louis, reported for the Reference Committee on Miscellaneous Affairs.

REPORT OF THE REFERENCE COMMITTEE ON MISCELLANEOUS AFFAIRS

The Reference Committee on Miscellaneous Affairs met in the Crystal Room of the Sheraton-Jefferson Hotel at 3:00 p.m. on March 13, 1960, with all members present.

The Committee recommends the adoption of the Report of the Committee on Aging. Your attention is specifically directed to that portion of this report entitled "Suggestions for a State Program" in which the Council recommends that each local society in the state set up a Committee on Aging with an active and energetic chairman.

The Committee recommends the adoption of the Report of the Committee on Hospital and Professional Relations. In regard to that portion of this report dealing with "In Quest of Health," your attention is directed to more recent action taken by the Council in regard to this matter, as reported on the first page of the Report of the Council in the delegates handbook.

Dr. Drescher was chairman of the Reference Committee on Miscellaneous Affairs.

The Committee recognizes the fact that a study of the Corporate Practice of Medicine in Missouri has many ramifications and that a thorough study of this matter may necessitate the expenditure of a large amount of money; however, it recommends that the staff of the Missouri State Medical Association be authorized to investigate several research organizations and invite their proposals for the consideration of the Committee on Corporate Practice.

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I move that these recommendations be adopted and that the report as a whole be adopted.

Upon motion, duly seconded, the report was adopted.

Dr. John P. Ferguson, Springfield, reported for the Reference Committee on Medical Education and Public Welfare.

REPORT OF THE REFERENCE COMMITTEE ON MEDICAL EDUCATION AND PUBLIC WELFARE

The Reference Committee on Medical Education and Public Welfare met at 4:30 p.m., March 13, with all members present.

It is recommended that the reports of the following committees be adopted: Cancer, Mental Health, Infant and Child Care, Health and Public Instruction, Eye Health, Scientific and Postgraduate Work, Publication, Industrial Health, Diabetes, Anesthesiology, Physical Medicine and Rehabilitation, Tuberculosis, Cardiac Disease, Medical Education and Hospitals, and Maternal Welfare. The latter committee has worked hard and diligently.

Dr. Ferguson was chairman of the Reference Committee on Medical Education.

Mr. Chairman, I move that this portion of the report be adopted.

Upon second, this portion of the report was adopted.

The Committee likewise moves the adoption of the report of the Committee on Laboratory Medicine and wishes to stress to members of the Association that portion of the report which deals with advertising by private laboratories.

The Committee also recommends the adoption of the report, and the supplementary report, of the Committee on Control of Venereal Diseases, and wishes to commend the Committee on the excellent job and the great amount of work that it has accomplished in the past year.

Mr. Chairman, I move you the adoption of this portion of the report.

Upon second, this portion of the report was adopted.

Finally, the Committee recommends the adoption of the report of the Committee on American Medical Education Foundation and again wishes to stress the great need of active participation of all Missouri doctors in this program. We would like to take this opportunity to congratulate Dr. James P. Murphy on his continued efforts on behalf of A.M.E.F.

Mr. Chairman, I move you the adoption of this portion of the report.

Upon second, this portion of the report was adopted.

Mr. Chairman, I move you that this report as a whole be accepted.

Upon second, the report as a whole was adopted.

Dr. James C. Cope, Columbia, reported for the Reference Committee on Reports of Officers.

REPORT OF THE REFERENCE COMMITTEE ON REPORTS OF OFFICERS

The Reference Committee on Reports of Officers met in Room 8 at the Sheraton-Jefferson Hotel at 3:30 p.m., on March 13, 1960. All members were present.

The addresses of retiring President, Dr. Ralph Perry, and incoming President, Dr. Ray Muether, were unanimously approved.

The Committee wishes to express to Dr. Perry its appreciation of his many years of service to the Missouri State Medical Association and sincerely hopes that his tenure of office has been as pleasant for him as it was stimulating to the Association. The Committee wishes to express its confidence in the administration of Dr. Muether and wish him a successful tenure of office.

Dr. Cope was chairman of the Reference Committee on Reports of Officers.

Dr. Dwyer spoke at a reference committee meeting.

The reports of the Secretary, Executive Secretary and Treasurer were approved as published.

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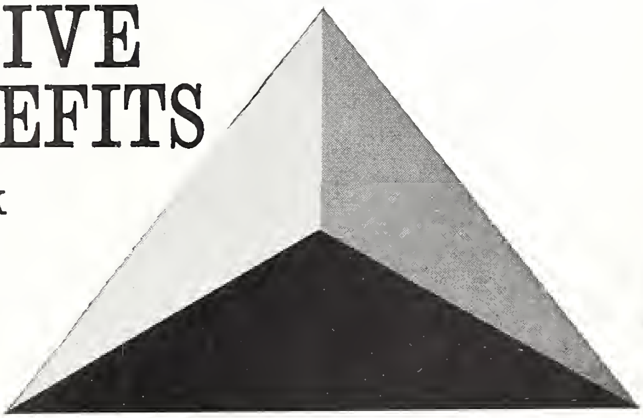

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The Report of the Council, as previously published, as well as the report of the Council meeting of February 13 and 14 which was contained in the Handbook, were approved. The Committee recommends that the portion of the report of the Council dealing with the Woman's Auxiliary be made a permanent part of the report and that the report from the Woman's Auxiliary to the House of Delegates be placed permanently on the agenda of the House.

The reports of the Committees on Civil Defense, Medical Economics, Public Policy and Public Relations and of the Committee on Rural Medical Service were approved as published.

Mr. Speaker, I move the adoption of this report.

Upon second, the report was adopted.

Dr. John W. Middleton, Louisiana, gave the report of the Reference Committee on Necrology.

REPORT OF THE REFERENCE COMMITTEE ON NECROLOGY

Whereas, Seventy-seven of our colleagues and members of this Association have been taken in death since the last Annual Session, and

Whereas, This number includes two former presidents of the Association, Dr. W. Logan Allee of Eldon, who held the office in 1934, and Dr. Arthur S. Bristow of Princeton, who served in 1946, both of whom gave distinguished, long and faithful service to the affairs of the medical profession in Missouri, and

Whereas, The loss of these physicians is deeply felt in communities throughout the state not only by patients and others who were close to them in family and in friendship, but felt as well by all citizens concerned for civic progress and the enrichment of human life in Missouri; therefore, be it

Resolved, That this House of Delegates spread on its minutes this expression of sorrow and of sympathy to the families, friends and patients of our departed members, and be it further

Resolved, That the "In Memoriam Perpetuum" scroll continue to be sent to the families of physicians who die in the coming year.

Mr. Speaker, I move the adoption of this resolution.

Dr. Middleton was chairman of the Reference Committee on Necrology.

Upon second, the resolution was adopted.

Members Deceased Since the 1959 Session

McIntire, Landon R., M.D., St. Charles
Stanze, Frank J., M.D., St. Louis
Hoxie, George H., M.D., Berkeley, Calif.
Murray, Louis F., M.D., St. Louis
Connor, John J., M.D., St. Louis
Buck, Ulysses G., M.D., Rothville
Fuerth, Arthur L., M.D., Cape Girardeau
Pendleton, George F., M.D., Kansas City
Cunningham, Eric A., M.D., Louisiana
Gunn, Aubrey J., M.D., Versailles
Gradwohl, R. B. H., M.D., St. Louis
Humphrey, Henry M., M.D., Brashear
Stone, William E., M.D., Boonville
Clay, Calvin, M.D., St. Charles
Rund, Emmet H., M.D., St. Louis
Myers, John L., M.D., Des Moines, Washington
Jolley, J. Frank, M.D., Mexico
Kennedy, Francis L., M.D., St. Louis
Odell, Richard T., M.D., St. Louis
Griffith, Harry M., M.D., Columbia
Bickford, Wallace M., M.D., Miami, Florida
Jennings, Perry W., M.D., Canton
Shumate, David L., M.D., Kansas City
Thiessen, Edward H., M.D., Mission Hills, Kansas
Moeller, Carl E., M.D., St. Louis
Epps, Curtis H., M.D., Springfield
Herbst, Frank, M.D., Kansas City
Shelby, Mitchell H., M.D., Cape Girardeau
Niedermeyer, Frederick P., M.D., Kansas City
Breuer, Robert E., M.D., Newburg
Mazur, Herbert A., M.D., University City
Heilbrunn, Max, M.D., Lockwood
Hearst, Allen L., M.D., Kansas City
Hanser, Otto C., M.D., St. Louis
Hogan, Frank E., M.D., Mound City
O'Brien, Raymond W., M.D., Kansas City
Finnegan, Frank R., M.D., St. Louis
Teneglia, Eutimio D., M.D., St. Louis
Bristow, Arthur S., M.D., Princeton
Erlanger, Herman, M.D., St. Louis
Fullbright, James H., M.D., Springfield
Locker, George, M.D., Iantha
Ellis, Coburn H., M.D., Garden City
Ferguson, Eugene H., M.D., Kansas City
McNamee, Owen J., M.D., St. Louis
Blaylock, Richard D., M.D., Jackson
Johnson, Paul A., M.D., Kansas City
Reichman, John J., M.D., Hannibal
Hallberg, John W., M.D., Everton
Allee, W. Logan, M.D., Eldon
Oglevie, Rial R., M.D., Kansas City
Duffy, Edgar A., M.D., Trenton
Henry, Clifford E., M.D., Kirksville
Hardy, John W., M.D., Butte, Montana
Holmes, Lemuel I., M.D., Miller
Freund, Newton W., M.D., St. Louis
Westphaelinger, Henry F., M.D., St. Louis
Lindsay, John W., M.D., Conway
Crossen, Robert J., M.D., Chapel Hill, N. C.
Morroway, James H., M.D., St. Joseph
Sims, John L., M.D., Joplin
Whitsell, John C., M.D., St. Joseph
Hamilton, Hugh G., M.D., Kansas City
Mott, James R., M.D.,
Snavely, Edmund C., M.D., Sedalia
Burns, Jonathan E., M.D., Charles Town
Lockwood, W. E., M.D., Slater
Hickerson, John C., M.D., Independence
Schuchat, W. Louis, M.D., St. Louis
Skoog, Andrew L., M.D., South Pasadena, Calif.
Jungk, Carl G. W., M.D., St. Louis
Hall, John, M.D., Ashland
McCubbin, James B., M.D., New York City
Van Urk, Jules B., M.D., Carthage
Kelling, George A., M.D., Waverly

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Kane, R. Emmett, M.D., St. Louis
Pullen, Roscoe L., M.D., Spokane, Wash.

NEW BUSINESS

Reinhold D. Dwyer, M.D., North Kansas City: I would like to present a resolution submitted by the Clay County Medical Society for the Councilor District 1 as follows:

Whereas, It is an accepted and recognized fact that we as a professional society are opposed to such legislation as embodied in the Forand Bill and have gone on record with such opposition, and

Whereas, All such legislation assumes, and unrightfully so, that the medical profession automatically will accept and cooperate with such legislation after it is put into law, and

Whereas, All of these laws to date, and most likely any in the future, state specifically that participation may be entire, partial or not at all, at the discretion of the individual doctor, therefore be it

Resolved, That this body of delegates representing the Missouri State Medical Association go on record as urging all of its members to nonparticipate should any such legislation be passed, and be it further

Resolved, That our Missouri Medical Association so inform all other states and the American Medical Association concerning its action and urging that they adopt a similar nonparticipation platform.

T. M. Macdonnell, M.D., Marshfield: This is a resolution submitted by the Eighth Councilor District:

Whereas, The Missouri Hospital Association has endorsed a program entitled, "In Quest of Health"—"The Hospital Story," designed for presentation to students in the elementary and secondary schools of Missouri, and

Whereas, In our opinion, this material distorts the role of the hospital in the health care system currently in practice in this country unduly emphasizing at least by inference the hospital as the "Medical Center" and minimizing the role of physicians, and

Whereas, The presentation of this material to students in Missouri schools will represent the presentation of a vested interest to a captive audience, and

Whereas, The Council of the Missouri State Medical Association has and continues to study this material and has made this body aware of the above dangers to our concept of good medical care, therefore be it

Resolved, That this House of Delegates does commend and endorse the action of the Council on this program and urges all Missouri doctors to fully inform themselves and other appropriate persons of insidious dangers of this program.

Kenneth E. Knabb, M.D., Springfield: This is a resolution introduced by the Greene County Medical Society delegation:

Whereas, The medical profession of Missouri has historically given full medical coverage without regard to ability to pay, and

Whereas, The Missouri State Medical Association reaffirmed this principle by refusing payment for medical care for the indigent under the Vendor Program, and

Whereas, The medical profession is constantly under attack by public pronouncements of the misinformed and in lay communications media, and

Whereas, There is no problem facing the medical profession today more deserving of our attention than an effective positive communications program to the general public through all available media, and

Whereas, The Missouri State Medical Association has established substantial financial reserves in accordance with the instructions of this House of Delegates, therefore be it

Resolved, That the Council be authorized and instructed to institute immediately an intensive program of public relations emphasizing the positive programs of the medical profession, and further be it

Resolved, That each county medical society be urged to take immediate measures to institute on a local level through local press media an educational advertising program emphasizing the guarantee of Missouri physicians that no individual in this state shall be without the services of a doctor for the lack of financial resources.

The Speaker referred these three resolutions to the Reference Committee on Resolutions.

There being no further business, the second session of the House adjourned at 5:30 p.m.

Wednesday, March 16, 1960

The House of Delegates convened at 1:45 p.m., March 16, 1960, in the Crystal Room, Sheraton-Jefferson Hotel, St. Louis, with William C. Mixson, M.D., Kansas City, Vice Speaker, presiding.

Robert B. Bassett, M.D., St. Louis, reported for the Committee on Credentials.

John I. Matthews, M.D., Jefferson City, Secretary, read the minutes of the Sunday and Monday meetings of the House of Delegates.

On motion, duly seconded, the minutes were adopted.

Frederick P. McCoy, M.D., Kansas City, presented the report of the Committee on Nominations.

Dr. McCoy reported for the Nominating Committee.

REPORT OF THE NOMINATING COMMITTEE

For Vice Presidents: Claude J. Hunt, M.D., Kansas City, Thomas S. Fleming, M.D., Moberly; Robert B. Bassett, M.D., St. Louis.

There being no nominations from the floor, on motion, duly seconded, these officers were declared elected.

For Delegates to the American Medical Association: Durward G. Hall, M.D., Springfield, alternate, Guy N. Magness, M.D., University City; H. E. Petersen, M.D., St. Joseph, alternate, J. Loren Washburn, M.D., Versailles; Robert Kelley, M.D., St. Louis, alternate to replace Dean Sauer, M.D., St. Louis, resigned.

There being no nominations from the floor, on motion, duly seconded, these officers were declared elected.

Dr. Bowser reported for the Reference Committee on Resolutions.

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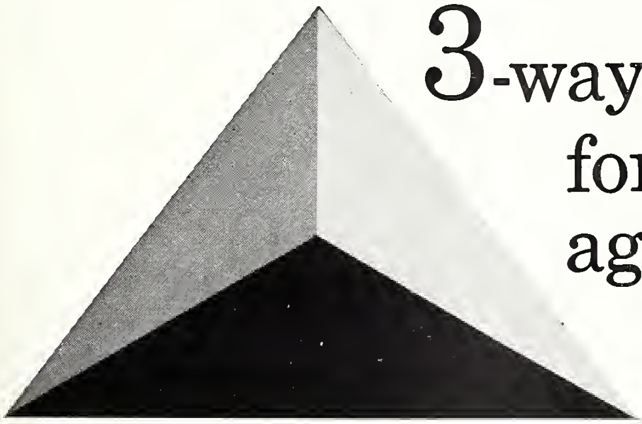

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For Speaker of the House of Delegates: Oscar P. Hampton, M.D., University City; Vice Speaker, William C. Mixson, M.D., Kansas City.

There being no nominations from the floor, on motion, duly seconded, these officers were elected.

Howard W. Carrington, M.D., Lebanon: I wish to place in nomination as President-Elect of the Missouri State Medical Association the name of a man who has been active for many years in both civic and organizational activities. He is a native Missourian and has been in practice for 28 years in Missouri, with the exception of time which was spent overseas during World War II.

He is a past president of his local medical society and his local Chamber of Commerce and Rotary Club, and currently is president of his local Tuberculosis Society. He is on the board of his regional Heart Association and is on committees of several other organizations.

For several years he has served the organization of the Missouri State Medical Association as a delegate and moved from there to the Council. After several years on the Council he was elevated to Chairman of that body two years ago. While he served as Councilor, he added greatly to the stature which he had locally throughout the entire district. We all regard him with a great deal of respect.

I would like to nominate Dr. Jacob H. Summers, from Lebanon, as President-Elect.

The nomination was seconded.

There being no other nominations, a motion, duly seconded, that the nominations close, carried.

On motion, duly seconded, Dr. Summers was elected President-Elect.

Dr. Summers was elected President-Elect.

J. H. Summers, M.D., Lebanon: Mr. Speaker, and members of the House of Delegates of the Missouri State Medical Association, I stand before you today truly an humble man, yet a grateful one, because it is a distinction and honor for me to be named President-Elect of our Association. I want you to know that I shall do my best. Thank you.

The Secretary announced the following reports of election of Councilors: First District, Donald M. Dowell, M.D., Chillicothe; Third District, Leonard T. Furlow, M.D., St. Louis; Fifth District, Byron M. Stuart, M.D., Boonville; Seventh District, Kenneth C. Hollweg, M.D., Kansas City.

Dr. John F. Bowser, Kansas City, gave the report of the Reference Committee on Resolutions.

REPORT OF THE REFERENCE COMMITTEE ON RESOLUTIONS

The Reference Committee on Resolutions met in the Crystal Room at 5:30 p.m. on Monday, March 14, for the consideration of three new resolutions and one hold-over resolution. After considerable discussion the Committee disapproved the resolution submitted by the delegation from Councilor District 1 relating to nonparticipation in Forand type legislation.

Dr. Motley received an award at the University of Missouri Medical Alumni luncheon.

Mr. Speaker, I move the adoption of this portion of the report.

Following a second to the motion, Dr. Reinhard D. Dwyer, North Kansas City, spoke in support of the resolution, and Dr. Daniel L. Sexton, St. Louis, spoke in support of the Committee recommendation.

Dr. Dwyer asked for a ballot vote on this portion of the Committee report, but on vote of the House of Delegates this was denied.

On vote, this portion of the report of the Reference Committee was adopted.

Dr. Bowser: Discussion was held on the three resolutions introduced by the 8th Councilor District. Because of limitation of time definitive consideration was delayed until 3:00 p.m. on Tuesday, March 15. The Committee recessed until that time.

The Committee resumed the deliberations at 3:00 p.m., on Tuesday, March 15, in Room 2. The Committee unanimously approved the following resolution:

Whereas, The Missouri Hospital Association has endorsed an educational program entitled, "In Quest of Health—The Hospital Story," designed for presentation to students in the elementary and secondary schools of Missouri, and

Whereas, In our opinion, this material contains scientific inaccuracies, and

Whereas, The presentation of this material to students in Missouri schools will represent the presentation of a vested interest to a captive audience, and

Whereas, The Council of the Missouri State Medical Association has and continues to study this material and has made this body aware of the above dangers to our concept of good medical care, therefore, be it

Resolved, That this House of Delegates does commend and endorse the action of the Council on this program and urges all Missouri doctors to fully inform themselves and other appropriate persons of this program.

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Mr. Speaker, I move the adoption of this portion of the report.

Upon second, this portion of the report was adopted.

The following resolution introduced by the 8th Councilor District was also unanimously approved by the Committee.

Whereas, The medical profession of Missouri has historically given full medical coverage without regard to ability to pay, and

Whereas, The Missouri State Medical Association reaffirms this principle by refusing payment for medical care for the indigent under the Vendor program, and

Whereas, The medical profession is constantly under attack by public pronouncements of the misinformed and in lay communications media, and

Whereas, There is no problem facing the medical profession today more deserving of our attention than an effective positive communications program to the general public through all available media, and

Whereas, the Missouri State Medical Association has established substantial financial reserves in accordance with the instructions of this House of Delegates, therefore, be it

Resolved, That the Council be authorized and instructed to institute IMMEDIATELY an intensive program of public relations emphasizing the positive programs of the medical profession, and further be it

Resolved, That each county medical society be urged to take *immediate* measures to institute on a local level through local news media an educational advertising program emphasizing the guarantee of Missouri physicians that no individual in this state shall be without the services of a doctor for the lack of financial resources.

Mr. Speaker, I move the adoption of this portion of the report.

Upon second, this portion of the report was adopted.

The following resolution was also unanimously approved by the Committee:

Whereas, The House of Delegates of the Missouri State Medical Association at this session has passed a resolution opposing House Resolution 4700, the Forand bill, the Kennedy-Hart bill and similar legislation, and

Whereas, The American Nursing Association has by a resolution, testimony before Congress and editorial taken a stand favoring such legislation, and

Whereas, Nursing is a profession closely allied to the medical profession and working in close cooperation with the ancillary and para medical personnel, be it therefore

Resolved, That the House of Delegates urge Missouri physicians to inform nurses and other allied professions, the ancillary and para medical personnel, of the dangers of the Forand bill and similar legislation.

Mr. Speaker, I move the adoption of this portion of the report.

Upon second, this portion of the report was adopted.

Mr. Speaker, I move the adoption of the report as a whole.

Upon second, the report as a whole was adopted.

John I. Matthews, M.D., Jefferson City: We have three proposed amendments to the By-Laws which have laid on the table for one day. First: Amend the By-Laws by deleting from Chapter VII, Committees, Sec. 2, the words "A Committee on Civil Defense" and inserting in lieu thereof the words, "A Committee on Civil Defense Disaster Medical Care" in the listing of the committees.

Upon motion, duly seconded, this amendment was adopted.

Dr. Matthews: The second amendment is: Amend Chapter VIII, Sec. 2, by deleting the first sentence which reads: "One dollar of the annual dues shall be credited to the account of the journal for each member's annual subscription," and by inserting in lieu thereof the following: "Sec. 2. One and one half dollars of the annual dues shall be credited to the account of the journal for each member's annual subscription."

Upon motion, duly seconded, this amendment was adopted.

Dr. Matthews: The third and final amendment is: Amend the By-Laws by deleting from Chap. VII, Committees, Sec. 2, the words "A Committee on Fractures" and inserting in lieu thereof the words "A Committee on Trauma."

On motion, duly seconded, this amendment was adopted.

Charles R. Doyle, M.D., St. Louis: Mr. Speaker, I am sure that everyone will approve of this New Business when they hear what it is about. Each of us, I am sure, recognized the wonderful work of our program committee this year, and I would like to move that the House of Delegates as a whole recognize the fine work of Dr. Matthews and his Committee in arranging this program and for the excellent scientific value of that program.

There being no objection, upon second, the motion was carried.

Dr. Perry installed the President, the President-Elect, the Vice Presidents, the A.M.A. Delegates and Alternates, the Councilors, the Speaker and Vice Speaker of the House.

Dr. Perry administered the Oath of Office.

R. O. Muether, M.D., St. Louis, read the appointments to committees to fill expired terms and chairmanships, which were approved by the House of Delegates, as follows:

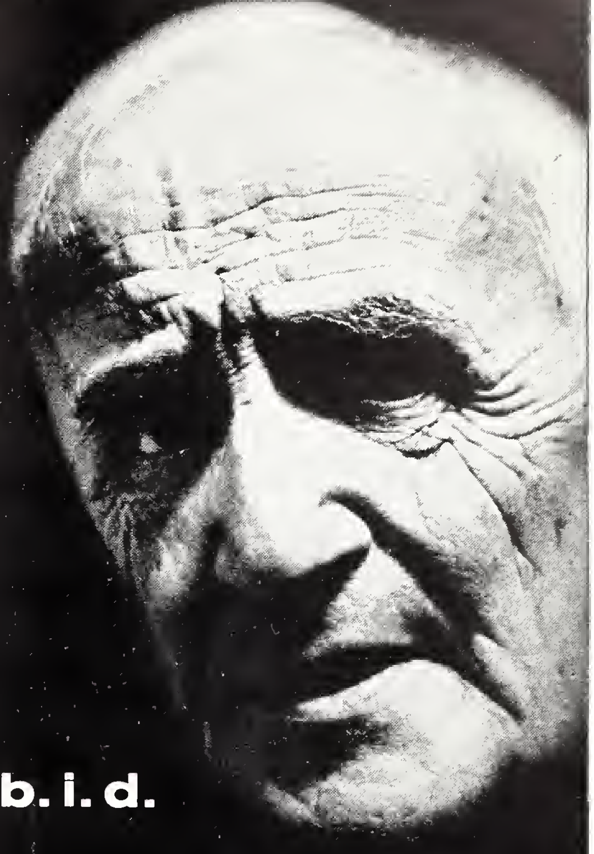
COMMITTEE APPOINTMENTS, 1960

Scientific and Postgraduate Work: John I. Matthews, Jefferson City, Chairman; Gerald L. Miller, Kansas City. Associate Members: Melvin C. Kasten, Cape Girardeau; Wyeth Hamlin, Hannibal; Kenneth K. Keown, Columbia; Robert W. Smith, Marceline; John A. Nuetzel, St. Louis.

Defense: C. E. Hyndman, St. Louis, Chairman.

Public Policy and Public Relations: Ben Bull, Ironton, Chairman; C. C. Cohrs, Moberly; R. J. Crider, St. Charles; Rolla B. Wray, Nevada; Floyd C. Atwell, Kansas City; C. B. Schoeberl, Joplin; H. W. Carrington, Lebanon; E. D. Imes, Maryville; R. R. Lyle, Versailles.

Medical Education and Hospitals: Kenneth Glover,



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  Nicotinic Acid .... 150 mg.
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Mount Vernon, Chairman; Associate Member: Doyle C. McCraw, Bolivar.

Cancer: Marvin L. Napper, Springfield, Chairman; Joseph L. Fisher, St. Joseph. Associate Members: John E. Lamy, Sedalia; Charles E. Lockhart, Springfield; Henry C. Allen, St. Louis; James R. McVay, Jr., Kansas City.

Medical Economics: Avery P. Rowlette, Moberly, Chairman; G. W. Winn, Boonville. Associate Members: R. D. Duncan, Springfield; Byron Watts, Jefferson City, John T. Crowe, Cape Girardeau.

Mental Health: James N. Haddock, Webster Groves, Chairman; Robert J. Mueller, St. Louis; Henry V. Guhleman, Jefferson City; George W. Forman, St. Joseph; D. R. Edwards, Sedalia; A. L. Brown, Springfield; Frank M. Grogan, St. Louis; Albert Preston, Kansas City; N. Venay Bolin, Kansas City; James M. A. Weiss, University City.

Dr. Muether was installed as President.

Maternal Welfare: James E. Keeler, Kansas City, Chairman; Irwin T. Craig, Joplin. Associate Members: P. V. Siegel, Smithton; H. C. Willumson, St. Joseph; A. C. Trueblood, St. Louis; Paul E. Kratz, Cape Girardeau; J. J. Wimp, Kirksville; MacDonald Bonebrake, Springfield; Eugene G. Hamilton, St. Louis; A. B. Sinclair, Kansas City.

Infant and Child Care: E. J. Schwartz, Springfield, Chairman; Daniel B. Landau, Hannibal; H. E. Petersen, St. Joseph; R. J. LaDriere, St. Louis; Guy N. Magness, University City; Clement E. Brooke, Columbia; James J. Pascoe, Nevada; Jack N. Wiles, West Plains; James A. Kinder, Cape Girardeau; S. F. Cockerell, Independence.

Health and Public Instruction: J. R. McDaniel, St. Joseph, Chairman; E. A. Belden, Jefferson City. Associate Members: Chester R. Peck, Kennett; John P. Mabrey, Plattsburg; C. Howe Eller, St. Louis County.

Constitution and By-Laws: W. A. Bloom, Fayette, Chairman; John F. Rutledge, Crystal City; W. F. Francka, Hannibal.

Committee on Trauma: Robert E. Funsch, University City, Chairman; C. Alan McAfee, St. Louis; Thomas G. Otto, Cape Girardeau. Associate Members: Howard McAlhaney, Springfield; Otis E. James, Kansas City; Grafton A. Smith, Columbia.

Committee on Eye Health: John McLeod, Kansas City, Chairman; Paul G. Wolff, Cape Girardeau. Associate Members: Dick H. Underwood, Kansas City; Leslie C. Drews, St. Louis; Michael F. Pernoud, St. Louis; D. E. Eggleston, Macon; W. L. Post, Joplin; Robert S. Minton, St. Joseph; Vernon B. Jackson, Fulton.

Laboratory Medicine: Fred C. Coller, Springfield, Chairman; T. J. Cooper, St. Louis.

Industrial Health: H. M. Roebber, Bonne Terre, Chairman; Douglas A. Ries, Richmond Heights. Associate Members: James W. Clawson, Springfield; C. Rush McAdam, St. Louis; Richard A. Sutter, University City.

Diabetes: H. E. Oppenheimer, Clayton, Chairman; Charles M. Lamke, Columbia. Associate Members: William H. Olmsted, St. Louis; Robert E. Koch, Clayton; Ralph W. Casford, Kansas City; J. H. Walterscheid, Hannibal.

Anesthesiology: Russell D. Shelden, Kansas City, Chairman; Walter W. Tillman, Springfield; Carl K. Ness, St. Joseph.

Hospital and Professional Relations: Hollis N. Allen, St. Louis, Chairman; Stanley S. Peterson, Springfield; Ralph Perry, Kansas City. Associate Members: W. F. Francka, Hannibal; Willard Bartlett, Jr., St. Louis.

Control of Venereal Disease: E. M. Powell, Springfield, Chairman; Robert B. Bristow, St. Joseph. Associate Member: John E. Byrne, St. Louis.

Physical Medicine and Rehabilitation: D. Elliott O'Reilly, St. Louis, Chairman; Robert H. Fitzgerald, Independence. Associate Member: Otakar Machek, St. Louis.

Civil Defense: Carl D. Siegel, Sedalia, Chairman; M. P. Leech, Fayette; H. D. Steinbeck, Union; Carroll P. Hungate, Kansas City; John R. Forgrave, St. Joseph; J. M. Canella, Hannibal; Curtis H. Lohr, Clayton; R. Ned White, Springfield; George E. Thoma, St. Louis; George L. Watkins, Farmington; O. P. Hampton, Clayton.

Aging: Stanley S. Peterson, Springfield, Chairman; Ralph Perry, Kansas City; Rolla B. Wray, Nevada; Louis H. Kohler, St. Louis; C. Thorpe Ray, Columbia. Associate Member: Robert Kingsland, Clayton.

Drs. Muether, Peterson and Perry study the Delegates' Handbook.

Tuberculosis: F. E. MacInnis, Kansas City, Chairman; Paul Murphy, St. Louis; H. M. Roberts, Kansas City;

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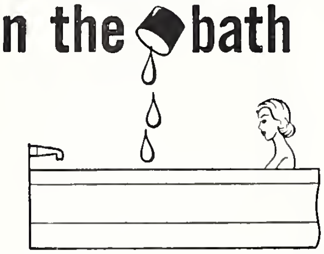

1. Spoor, H. J.: N. Y. State J. Med., Oct. 15, 1958

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Joseph L. Lucido, St. Louis; Walter C. Gray, St. Louis; David N. Kerr, St. Louis; Glenn O. Turner, Springfield; Carl G. Popp, Sikeston.

Study of Cardiac Disease: Earl L. Loyd, Jefferson City, Chairman; E. Lee Shrader, St. Louis; William I. Park, Springfield; William J. Shaw, Sr., Fayette; Jack M. Martt, Columbia; Martin P. Hunter, Kansas City; William J. Gillespie, St. Louis; Caryl A. Potter, St. Joseph; F. J. Biggs, Poplar Bluff.

Rural Medical Service: Jack Mullen, Bonne Terre, Chairman; E. L. Niedermeyer, Tarkio; K. S. Latham, California; B. J. Bass, Salem; John F. Pearl, St. Clair; F. A. Barnett, Paris; Charles A. Worley, Sweet Springs; Fred L. Wommaek, Crane.

American Medical Education Foundation: James P. Murphy, St. Louis, Chairman; Hugh E. Stephenson, Columbia; William T. McNew, Carthage; Russell D. Shelden, Kansas City; Allen I. Herman, St. Joseph.

Dr. Frederick P. McCoy, Kansas City, speaking for Jackson County Medical Society, invited the Association to meet in Kansas City in 1961.

Dr. McCoy invited the Association to meet in Kansas City in 1961.

Upon motion, duly seconded, the invitation was accepted.

Upon motion, duly seconded, the House of Delegates adjourned at 2:40 p.m.

THE COUNCIL

Sheraton-Jefferson Hotel, St. Louis
March 13, 1960

The Council met at 8:30 a.m., March 13, at the Sheraton-Jefferson Hotel, J. H. Summers, M.D., Lebanon, Chairman, presiding. Those present were Drs. Summer, Donald M. Dowell, Chillicothe; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; Ben M. Bull, Ironton; Ralph Perry, Kansas City; R. O. Muether, St. Louis; O. P. Hampton, University City; William C. Mixson, Kansas City; Richard H. Kiene, Kansas City; H. E. Petersen, St. Joseph; Messrs. John W. Nobel, Kennett; John R. Buckner, Springfield; Jordan Singleton, Lemoine Skinner and T. R. O'Brien, and Helen Penn, St. Louis.

AMENDMENT ON DUES CREDITED TO JOURNAL

It has been called to the attention of the Council by The Ovid Bell Press, Inc., which prints MISSOURI MEDICINE, that Section 132.23 E, Postal Manual, specifies that publications carrying advertising must be limited in circulation to "copies mailed to members who pay either as a part of their dues or assessments, or otherwise, not less than 50 per cent of the regular subscription price to other actual subscribers, to exchanges, and 10 per cent of such circulation as sample copies."

Dr. Muether presided at the Council meeting until Dr. Dowell was elected Chairman and Dr. Bull, Vice Chairman.

The subscription price of MISSOURI MEDICINE is $3.00 and the By-Laws, Chapter VIII, Sec. 2, states: "One dollar of the annual dues shall be credited to the account of The Journal for each member's annual subscription. The remainder of the amount shall be credited to the general fund of the Association."

Since MISSOURI MEDICINE has been self-sustaining since 1954, finances are actually not involved, but it is important that we conform to postal regulations.

Therefore, the Council recommends the following amendment to the By-Laws: Amend Chapter VIII, Sec. 2, by deleting the first sentence which reads: "One dollar of the annual dues shall be credited to the account of The Journal for each member's annual subscription," and by inserting in lieu thereof the following:

"Sec. 2. One and one half dollars of the annual dues shall be credited to the account of The Journal for each member's annual subscription."

On motion of Dr. Stuart, duly seconded, this was approved for presentation to the House of Delegates.

CIVIL DEFENSE

Since the American Medical Association and many state associations are using the term "Disaster Medical Care" rather than "Civil Defense" and since such work is better described presently by the first term, it is recommended that the By-Laws be amended by deleting from Chapter VII. Committees, Sec. 2, the words "A Committee on Civil Defense," and inserting in lieu thereof the words, "A Committee on Disaster Medical Care," in the listing of committees. Also in Chapter VII. Committees, Sec. 2, the paragraph dealing with the duties of the Committee on Civil Defense be deleted and the

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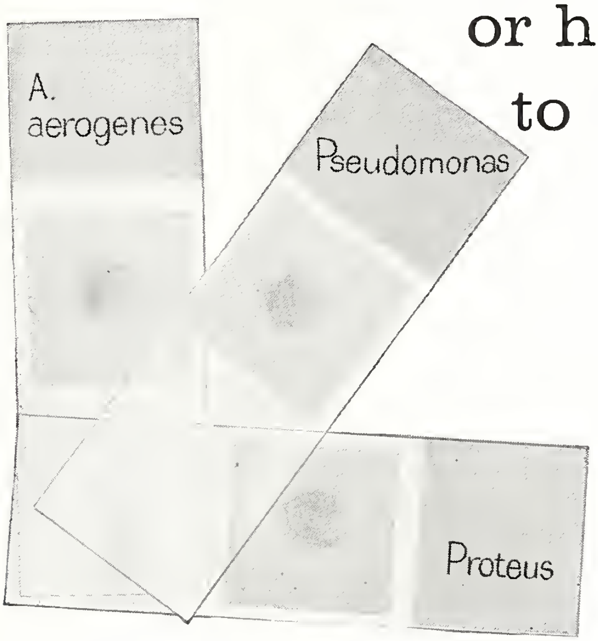

1. Finland, M.; Hirsch, H. A., and Kunin, C. M.: Read at Seventh Annual Antibiotics Symposium, Washington, D. C., November 5, 1959. 2. Hirsch, H. A.; Kunin, C. M., and Finland, M.: **München. med. Wchnschr.** To be published. 3. Roberts, M. S.; Seneca, H., and Lattimer, J. K.: Read at Seventh Annual Antibiotics Symposium, Washington, D. C., November 5, 1959. 4. Vineyard, J. P.; Hogan, J., and Sanford, J. P.: **Ibid.**

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following, using the new term for the Committee, be inserted in lieu thereof:

"The Committee on Disaster Medical Care shall consist of ten members of the Association, appointed annually by the president, one from each of the ten Councilor Districts, and, in addition, any other members who are interested in the medical aspects of disaster medical care; the Committee shall concern itself with the development of disaster medical care operations in the state and shall cooperate with public officials and private organizations in the furtherance of disaster medical care activities."

On motion of Dr. Tillman, duly seconded, this was approved for presentation to the House of Delegates.

CONFERENCE ON AGING

A list of meetings of the state groups in various areas was presented as follows: St. Joseph, March 15; Fulton, March 21; Springfield, March 23; St. Louis, March 25; Macon, April 5; Sikeston, April 7; West Plains, April 19; Kansas City, April 20; Warrensburg, April 21 or 28.

It was pointed out that the American Association of Social Welfare as well as other groups were encouraging conferences to favor Forand type legislation and that it was important that physicians be at these meetings.

JACKSON COUNTY DELEGATES

Dr. Perry presented a letter from Dr. Gainey, president of the Jackson County Medical Society stating that delegates could not attend the session at its present length. It was decided that this should be studied further and Dr. Perry was asked to write Dr. Gainey that it was being studied.

"HOSPITAL STORY"

Dr. Perry reported that he had been called by Mr. Holtz of the Amidon Company concerning possible changes in the "In Quest of Health" to make it acceptable to physicians. Dr. Furlow said that he had been contacted in St. Louis.

Meeting of March 16, 1960

The Council met at the Sheraton-Jefferson Hotel following the session of the House of Delegates on March 16, 1960, Dr. R. O. Muether, President, presiding until the Chairman of the Council was elected. Those present were Drs. Muether; Donald M. Dowell, Chillicothe; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; Ben M. Bull, Ironton; J. H. Summers, Lebanon; Messrs. John W. Noble, Kennett; Lemoine Skinner, Ray McIntyre; Tom R. O'Brien, and Helen Penn, St. Louis.

OFFICERS ELECTED

The following officers were elected: Chairman of the Council, Dr. Donald M. Dowell, Chillicothe; Vice Chairman of the Council, Dr. Ben M. Bull, Ironton; Secretary, Dr. John I. Matthews, Jefferson City; Treasurer, Dr. Charles R. Doyle, St. Louis.

PUBLIC SERVICE

The resolution adopted by the House of Delegates proposing stepped-up public information on medical services was discussed. On motion of Dr. Furlow, it was voted that an appropriation of not more than $15,000 be made available in the next six months for study and implementation of the work.

MENTAL HEALTH

It was announced that Dr. Duval had called a conference on mental health for this fall and had asked the support of the Association. It was suggested that he meet with the Committee on Mental Health, and through that Committee with the Council.

Some of the Councilors pose for a picture.

CORPORATE PRACTICE

The following committee to study corporate practice was appointed: Drs. J. H. Summers, Lebanon, Chairman; R. O. Muether, St. Louis; Ralph Perry, Kansas City; H. W. Benoit, Kansas City; John P. Ferguson, Springfield; Joseph L. Fisher, St. Joseph; Robert W. Kelley, St. Louis; Emmett B. Drescher, St. Louis; and John J. Modlin, Columbia.

NEXT MEETING

The next meeting of the Council was set for May 21 and 22.

REGISTRATION AT THE ONE HUNDRED AND SECOND ANNUAL SESSION

First Councilor District—29

Bales, Eugene L., Maryville
Bauman, Henry C., Maryville
Bohnsack, R. W., Brookfield
Broyles, Watkins A., Bethany
Clark, C. L., Trenton
Cullers, Charles H., Trenton
Dixon, John R., Brookfield
Dowell, Donald M., Chillicothe
Fisher, Joseph L., St. Joseph
Gary, George, Marceline
Herman, Allen I., St. Joseph
Ide, Lucien W., St. Joseph
Imes, E. D., Maryville
Knepper, Paul A., St. Joseph
Knox, Earl R., Kansas City
Long, Forrest C., Savannah
Mabrey, J. P., Plattsburg
Martin, J. N., St. Joseph
Nixon, Edward E., Gallatin
O'Connor, William B., St. Joseph
Petersen, H. E., St. Joseph
Potter, T. E., St. Joseph
Riddell, R. V., St. Joseph
Rost, William B., St. Joseph
Schertz, T. B., Kansas City
Spelman, A. E., Smithville
Sweiger, James H., Maysville

Second Councilor District—20

Burns, Francis R., Hannibal
Campbell, James E., Macon
Canella, J. M., Hannibal
Davis, Landis Y., Canton
Dreyer, P. V., Huntsville
English, Milton T., Kirksville
Fleming, Thomas S., Moberly
Fleming, J. W., Jr., Moberly
Francka, W. F., Hannibal
Hamlin, Wyeth, Hannibal

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Isom, Waldo B., Knox City
Kibbe, John H., Monroe City
Landau, Daniel B., Hannibal
Lanning, Robert J., Hannibal
Lewellen, Charles H., Louisiana
Middleton, John W., Louisiana
Murphy, B. L., Hannibal
Rowlette, Avery P., Moberly
Tarvydas, Francis, Edina

Third Councilor District—197

Archer, Harry L., St. Louis
Allen, Henry C., Webster Groves
Allen, Hollis N., St. Louis
Allen, William E., Jr., St. Louis
Altheide, J. Paul, St. Louis
Aufderheide, G. R., St. Louis
Austin, M. G., St. Louis
Ayars, T. R., St. Louis
Bailey, Drennan, St. Louis
Bartlett, Robert W., St. Louis
Bassett, R. B., St. Louis
Baumgarten, Walter, St. Louis
Becker, E. J., St. Louis
Belew, Joe, St. Louis
Benjamin, D., St. Louis
Berg, Ralph, St. Louis
Berry, John W., Clayton
Boedeker, Roy V., St. Louis
Boemer, L. C., St. Louis
Bohne, W. R., St. Louis
Brown, James B., St. Louis
Budil, Edward J., University City
Burford, C. E., St. Louis
Burford, E. H., St. Louis
Burns, F. J., St. Louis
Caciolo, Carlo, St. Louis
Campbell, C. S., St. Louis
Cannon, E. M., St. Louis
Cannon, W. S., St. Louis
Carroll, Grayson, St. Louis
Cherre, A. J., Clayton
Clark, James F., St. Louis
Cooper, T. J., St. Louis
Costello, J. P., Jr., St. Louis
Curran, George L., St. Louis
Danis, Peter G., St. Louis
Davis, Martin W., St. Louis
Devine, John B., St. Louis
Doyle, Charles R., St. Louis
Dyer, Dallas J., St. Louis
Eberle, John, St. Louis
Ellersieck, D. M., St. Louis
Ernst, Edwin C., St. Louis
Ernst, Richard E., St. Louis
Fitzgerald, Leo P., University City
Fitzgibbons, J. F., St. Louis
Ford, Lee T., St. Louis
Fox, Robert, St. Louis
Franklin, Max A., St. Louis
Fries, A. D., St. Louis
Fryer, Minot P., St. Louis
Furlow, L. T., St. Louis
Gafney, George T., St. Louis
Gomez, Cesar A., St. Louis
Graul, Walter P., St. Louis
Grayson, T. L., St. Louis
Grogan, Frank M., St. Louis
Grybinas, V. J., St. Louis
Gunn, Walter, St. Louis
Hall, Preston, St. Louis
Hampton, S. F., St. Louis
Hanlon, C. R., St. Louis
Harmann, M. F., St. Louis
Hartstein, Jack, St. Louis
Hartwig, John A., St. Louis
Hartnett, Leo, St. Louis
Hawkins, G. L., Jr., Webster Groves
Headrick, John A., St. Louis
Hobart, Carl, St. Louis
Hofstatter, Leopold, St. Louis
Hofstatter, Lilli, St. Louis
Holdenried, W. E., St. Louis
Hollo, Vencel W., St. Louis
Holtz, Alan S., Kirkwood
Janney, J. G., Jr., St. Louis
Jean, J. T., St. Louis
Jensen, J. E., St. Louis
Johnstone, J., Jr., Kirkwood
Jones, O. S., St. Louis
Jones, V. L., St. Louis
Jordan, Walter R., St. Louis
Karl, M. M., St. Louis
Keller, Louis, Clayton
Kelley, R. W., St. Louis
Kerr, David N., Clayton
King, John V., St. Louis
Kirchner, W. C., St. Louis
Kistner, W. F., Clayton
Klein, Harry A., St. Louis
Kleinschmidt, C., St. Louis
Klym, Nicholas, St. Louis
Kneal, E., St. Louis
Kohler, E. J., St. Louis
Kohler, L. H., St. Louis
Kountz, W. B., St. Louis
Koutsoumpas, W. V., St. Louis
Krebs, J. M., Clayton
Kuebrich, T. C., Ferguson
Kurz, R. F., St. Louis
Lamb, F. P., St. Louis
Lane, C. W., St. Louis
Lassar, G., St. Louis
Lawton, T. J., St. Louis
Lee, Gerald B., Webster Groves
Lewis, J. E., St. Louis
Loeb, Virgil, Jr., St. Louis
Loeffel, Ellen, St. Louis
Long, C. L., Jr., St. Louis
Lottes, J. O., St. Louis
McAdam, C. R., St. Louis
McDowell, Frank, St. Louis
McMahon, A., St. Louis
Maas, Hermann, St. Louis
Macdonald, W. C., St. Louis
Macko, J. R., St. Louis
Max, Paul F., St. Louis
Maze, L. E., St. Louis
Mannis, Ben, St. Louis
Melick, W. F., St. Louis
Montani, Charles, St. Louis
Montgomery, A. F., Clayton
Moore, Carl V., University City
Morris, Harvey E., St. Louis
Morris, May E., St. Louis
Mowrey, W. O., University City
Mudd, Gerard, St. Louis
Mueller, Robert, St. Louis
Muether, R. O., St. Louis
Mulligan, L. V., St. Louis
Murphy, James T., St. Louis
Murphy, Paul, St. Louis
Mutshnick, Clara P., St. Louis
Naryka, J. J., St. Louis
Neilson, A. W., St. Louis
Nester, Charles A., St. Louis
Newman, Percy, St. Louis
Nishi, James A., St. Louis
Olmsted, W. H., St. Louis
Ongjoco, M. I., St. Louis
Oppenheimer, Henry E., St. Louis
Orenstein, J. M., St. Louis
Palazzo, Frank A., St. Louis
Peden, J. C., St. Louis
Pernoud, F. G., St. Louis
Pernoud, M. F., St. Louis
Pfeifer, O. C., St. Louis
Potter, R. H., Webster Groves
Pranger, S. H., St. Louis
Pratt, D. E., St. Louis
Ramsey, R. H., Ferguson
Renoleman, G. F., St. Louis
Ries, Douglas A., St. Louis
Riordan, L. M., St. Louis
Rosenfeld, Henry, St. Louis
Ruddell, G. W., St. Louis
Ruhling, R., St. Louis
Ryan, Robert E., St. Louis
Schattyn, Martyn, St. Louis
Scherman, Victor E., St. Louis
Schneider, Vincent A., St. Charles
Schmitz, Edgar F., Ferguson
Schwartz, Frederick O., St. Louis
Schweiss, John F., St. Louis
Scopelite, Joseph A., St. Louis
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Sexton, Daniel, St. Louis
Shapleigh, John B., St. Louis
Shen, Jerome, St. Louis

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Strauss, Arthur E., St. Louis
Stoneman, William, St. Louis
Thoma, George E., Jr., St. Louis
Thompson, J. W., St. Louis
Thompson, Lawrence D., St. Louis
Tibbs, William A., Jr., St. Louis
Tichenor, R. W., Sappington
Tremain, I. G., St. Louis
Tjoflat, O. E., St. Louis
Ungvari, Joseph C., St. Louis
Vermillion, C. O., St. Louis
Vezeau, S., St. Louis
Vohs, Carl F., St. Louis
Von Kaenel, Joseph E., St. Louis
Wagenbach, William, St. Louis
Wall, Emmett D., St. Louis
Weir, Don C., Webster Groves
Weiss, Richard S., St. Louis
Weyerich, L. F., St. Louis
Weigand, Herbert C., University City
Willman, V. H., St. Louis
Zeinert, Oliver B., University City

Fourth Councilor District—99

Bagby, J. W., Clayton
Bailey, W. H., St. Louis
Beam, Sim F., St. Louis
Bolinske, R. E., Clayton
Brenner, Paul A., Owensville
Brown, Eugene R., University City
Bruns, Kenneth, St. Charles
Cacioppo, Joseph E., St. Louis
Coldwater, K. B., St. Louis
Castrino, John J., University City
Crawford, Robert M., Sullivan
Cutler, Harry, St. Louis
Davis, E. W., St. Louis
Deyton, John, St. Louis
Diehr, M. A., St. Louis
Doisy, Robert A., Glendale
Drescher, Emmitt B., University City
Duzne, George W., Clayton
Ecker, D. B., Pacific
Eisenmann, B. P., New Haven
Eller, C. Howe, St. Louis
Engleman, R., St. Louis
Flak, O. P. J., St. Louis
Fallet, Charles E., DeSoto
Finkel, Barney W., St. Louis
Finley, F. L., Overland
Forsman, W. W., St. Louis
Freiheit, H. J., Ladue
Frisch, Jane, St. Louis
Gall, Ira C., St. Louis
Goodman, Nathaniel, St. Louis
Gray, Walter C., St. Louis
Grundmann, William H., St. Louis
Hagemann, Paul O., St. Louis
Hampton, Oscar P., St. Louis
Howe, Louis F., St. Louis
Izmirlian, Grant, Webster Groves
Johnson, G. C., Marthasville
Jotte, Richard F., St. Ann
Keller, Robert M., Wentzville
Kendis, Joseph B., St. Louis
King, E. E., St. Louis
Kingsland, Robert S., St. Louis
Kister, George E., St. Charles
Koch, Robert E., Clayton
Kipp, Jules H., St. Louis
Kozal, Frank L., Crystal City
Kuttner, Marianne, University City
McNally, M., Kirkwood
Magness, Guy, University City
Mayer, Robert A., St. Louis
Mays, Frank G., Washington
Meador, James, Clayton
Mendelson, David F., Clayton
Merrims, Theodore, University City
Meyer, James E., Ballwin
Miles, Paul W., St. Louis
Moore, Harry G., St. Louis
Mothershead, Edgar J., Clayton
Muench, L. O., Washington
Mullarky, W. A., St. Louis
Nakada, James R., Frontenac
Oakley, John E., Clayton
O'Connell, John, Overland
O'Keefe, Joseph, Webster Groves
Poggemeier, William H., St. Charles
Post, J. R., Washington
Randall, Don A., St. Charles
Reilly, P. J., St. Louis
Richardson, George A., Union
Richardson, W. R., Union
Roblee, Melvin A., St. Louis
Rother, Paul H., St. Charles
Rusin, Robert, St. Louis
Schmidt, H. H., Washington
Schmidt, R. M., St. Louis
Senn, E. J., Herculaneum
Shepherd, Charles T., Clayton
Stein, H. J., St. Louis
Stein, Leonard A., St. Louis
Steiner, A. J., St. Louis
Strehlman, B. J., Union
Sutter, Richard A., St. Louis
Torin, B. A., St. Louis
Trueblood, A. C., St. Louis
Valach, Frank J., Brentwood
Vitale, Anthony J., St. Louis
Vitale, Nicholas S., St. Louis
Walker, Harvey, Jr., St. Louis
Wepprich, Michael S., Washington
Werth, Duncan S., Glendale
Westrup, Arthur W., Webster Groves
Westrup, Ellsworth A., Webster Groves
Whitener, Paul R., Bridgeton
Williamson, O. E., St. Louis
Workman, G. M., Hermann
Wyatt, Lois C., Kirkwood
Young, Robert S., St. Louis
Zuckner, Jack, St. Louis

Fifth Councilor District—43

Beldon, E. A., Jefferson City
Cassel, William J., Jr., Jefferson City
Chalkley, Judson I., Columbia
Clark, Kendall A., Jefferson City
Cope, J. C., Columbia
Duval, Addison M., Jefferson City
Dwyer, Thomas L., Mexico
Evans, A. McChesney, Columbia
Fuchs, George J., Jr., Columbia
Gardner, Joseph W., Glasgow
Garner, Lynn, Jefferson City
Gurnee, L. H., Jefferson City
Haugen, Harold M., Columbia
Jackson, Robert L., Columbia
Jackson, Vernon B., Fulton
Jolly, Ben N., Mexico
Keats, Theodore E., Columbia
Keown, Kenneth K., Columbia
Kibbe, E. A., California
Ladenson, R. P., Columbia
Leonhardt, Erwin, St. Louis
Loyd, Earl L., Jefferson City
McHaney, John W., Jefferson City
Matthews, John, Jefferson City
Miller, LeRoy, Columbia
Neal, M. Pinson, Columbia
Perna, Vincent P., Columbia
Ray, C. Thorpe, Columbia
Ritterbusch, J. K., Fulton
Roden, J. C., Columbia

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REFERENCES: **1.** Gifford, R. W., Jr., *In* Hypertension, ed. by J. H. Moyer, Saunders, Philadelphia, 1959, p. 561. **2.** Moyer, J. H.: *Ibid.* p. 299. **3.** Brodie, B. B.: *In* Hypertension, Vol. VII, Proceedings Council for High Blood Pressure Research, Am. Heart Assn., ed. by F. R. Skelton, 1959, p. 82. **4.** Wilkins, R. W.: Ann. Int. Med. 50:1, 1959. **5.** Freis, E. D.: *In* Hypertension, ed. by Moyer, *op. cit.,* p. 123. **6.** Ford, R. V., and Nickell, J.: Ant. Med. & Clin. Ther. 6:461, 1959. **7.** Fuchs, M., and Mallin, S. R.: Int. Red. Med. 172:438, 1959.

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Stewart, William J., Columbia
Stuart, B. M., Boonville
Summers, Joseph S., Jefferson City
Washburn, J. L., Versailles
Wilson, Vernon E., Columbia
Winn, G. W., Boonville

Sixth Councilor District—22

Barger, O. B., Harrisonville
Bess, W. E., Sedalia
Campbell, Albert J., Sedalia
Gonser, Karl, Sedalia
Hansen, A. L., Butler
Holmes, David, St. Louis
Kelling, Jordan, Waverly
King, Richard H., Clinton
Lederer, C. M., Warrensburg
McBurney, C. A., Slater
Maddox, A. R., Sedalia
Magee, R. L., El Dorado Springs
Martin, W. E., Odessa
Maxson, T. Reed, Warrensburg
Pearse, Roy W., Jr., Nevada
Siegel, P. V., Smithton
Smith, James O., Clinton
Stauffacher, C. Gordon, Sedalia
Stewart, Robert H., Sedalia
Strong, David, Harrisonville
Wray, Rolla B., Nevada
Worley, C. A., Sweet Springs

Seventh Councilor District—52

Berry, Maxwell G., Kansas City
Bowser, John F., Kansas City
Brams, Jack B., Kansas City
Buhler, Victor B., Kansas City
Byers, P. L., Kansas City
Caldwell, John K., Kansas City
Callaway, L. M., Kansas City
Farney, J. P., Kansas City
Frick, J. P., Kansas City
Fulton, A. E., Kansas City
Getelson, Joseph, Kansas City
Gilkey, Harry M., Kansas City
Gilliland, A. S., Kansas City
Gist, William, Kansas City
Growdon, John A., Kansas City
Hanes, Robert L., Kansas City
Hickerson, W. H., Independence
Hollweg, Kenneth C., Kansas City
Hughes, Gerald E., Kansas City
Hunt, Claude J., Kansas City
Jonas, Harry S., Independence
Katz, Milton, Kansas City
Keeler, James E., Kansas City
Kerr, Russell W., Kansas City
Kiene, Richard H., Kansas City
Kitchen, W. M., Kansas City
Knoch, H. Kermit, Kansas City
Lapi, Angelo, Kansas City
Lapi, Ruth M., Kansas City
Lindquist, Carl H., Kansas City
McCoy, Frederick J., Kansas City
McVay, James R., Kansas City
Meyer, Paul W., Kansas City
Miller, Gerald L., Kansas City
Mixson, William C., Kansas City
Moriarty, L. R., Kansas City
Multhauf, C. J., Kansas City
Perry, Ralph, Kansas City
Pipkin, Garrett, Kansas City
Quer, Erich A., Kansas City
Reinhardt, G. R., Kansas City
Reister, Dorothy D., Kansas City
Reister, Philip, Kansas City
Remley, G. C., Kansas City
Stockton, Raymond, Kansas City
Teall, R. E., Kansas City
Trowbridge, E. H., Jr., Kansas City
Wheeler, Charles, Kansas City
Whitmore, J. S., Kansas City
Wilhelm, W. F., Kansas City
Wilkinson, E. A., Kansas City
Wortmann, Robert F., Kansas City

Eighth Councilor District—47

Barnett, Norman H., Joplin
Bonebrake, MacDonald, Springfield
Bowman, Melvin C., Neosho
Brasher, Charles A., Mt. Vernon
Brown, F. B., Aurora
Brown, James T., Springfield
Callaway, Guy, Springfield
Clarke, Michael J., Springfield
Cohle, Richard R., Carthage
Coller, Fred, Springfield
Craig, Irwin T., Joplin
Donley, Robert R., Monett
Hall, Durward G., Springfield
H'Doubler, E. T., Springfield
Ferguson, John P., Springfield
Ferguson, R. L., Joplin
Gentry, M. L., Springfield
Glover, Kenneth, Mt. Vernon
Gose, Don F., Springfield
Graves, Arthur J., Mt. Vernon
Griffin, Evelyn, Buffalo
Griffin, O. A., Buffalo
Hobbs, George H., Mt. Vernon
Knabb, Kenneth E., Springfield
Kolze, V. W., Springfield
Lemmon, G. B., Jr., Springfield
Lockhart, C. E., Springfield
Lurie, Hal, Springfield
McNew, W. J., Carthage
Macdonnell, T. M., Marshfield
Napper, Marvin L., Springfield
Newman, Mary, Cassville
Park, William I., Springfield
Peterson, Stanley S., Springfield
Roper, Stanley D., Ozark
Royce, J. J., Noel
Sewell, W. S., Springfield
Schulte, G. A., Joplin
Scorse, S. W., Joplin
Smith, C. S., Springfield
Snead, William H., Springfield
Tillman, W. W., Springfield
White, R. Ned, Springfield
Whitten, M. Foster, Carthage
Wommack, Fred L., Crane
Yancey, D. L., Springfield
Yates, J. Lewis, Mt. Vernon

Ninth Councilor District—13

Andreassen, D. F., Rolla
Bass, B. J., Salem
Carrington, H. W., Lebanon
Cooper, C. W., Thayer
Garrison, T. W., Jr., Camdenton
Hope, James L., Lebanon
Miller, Harold W., Willow Springs
Riffel, Gordon W., Bourbon
Stricker, E. A., St. James
Summers, Jacob H., Lebanon
Underwood, M. K., Rolla
Wiles, J. N., West Plains
Young, Robert B., Rolla

Tenth Councilor District—27

Appleberry, C. H., Flat River
Beecher, S. B., Poplar Bluff
Biggs, Fred J., Poplar Bluff
Bull, Ben M., Ironton
Campbell, E. D., Cape Girardeau
Carleton, C. E., Farmington
Crowe, John T., Cape Girardeau
English, W. D., Cardwell
Fairchild, J. F., Perryville
Finney, W. D., Chaffee
Fischer, Theodore, Altenburg
Haw, Marvin T., Bonne Terre
Kasten, Melvin C., Cape Girardeau
McDermott, A. E., Perryville
McGinty, C. P., Cape Girardeau
McLain, B. M., Poplar Bluff
Menne, Melvin C., Arcadia
Michaelis, C. E., Fredericktown
Parks, Stephen, Bloomfield
Peck, C. R., Kennett
Post, Cyril A., Poplar Bluff
Reynolds, G. A., Cape Girardeau
Roebber, H. M., Bonne Terre
Tarver, Quinton, Kennett
Taylor, Van W., Bonne Terre
Tribble, Robert E., Chaffee
Wolff, Paul, Cape Girardeau

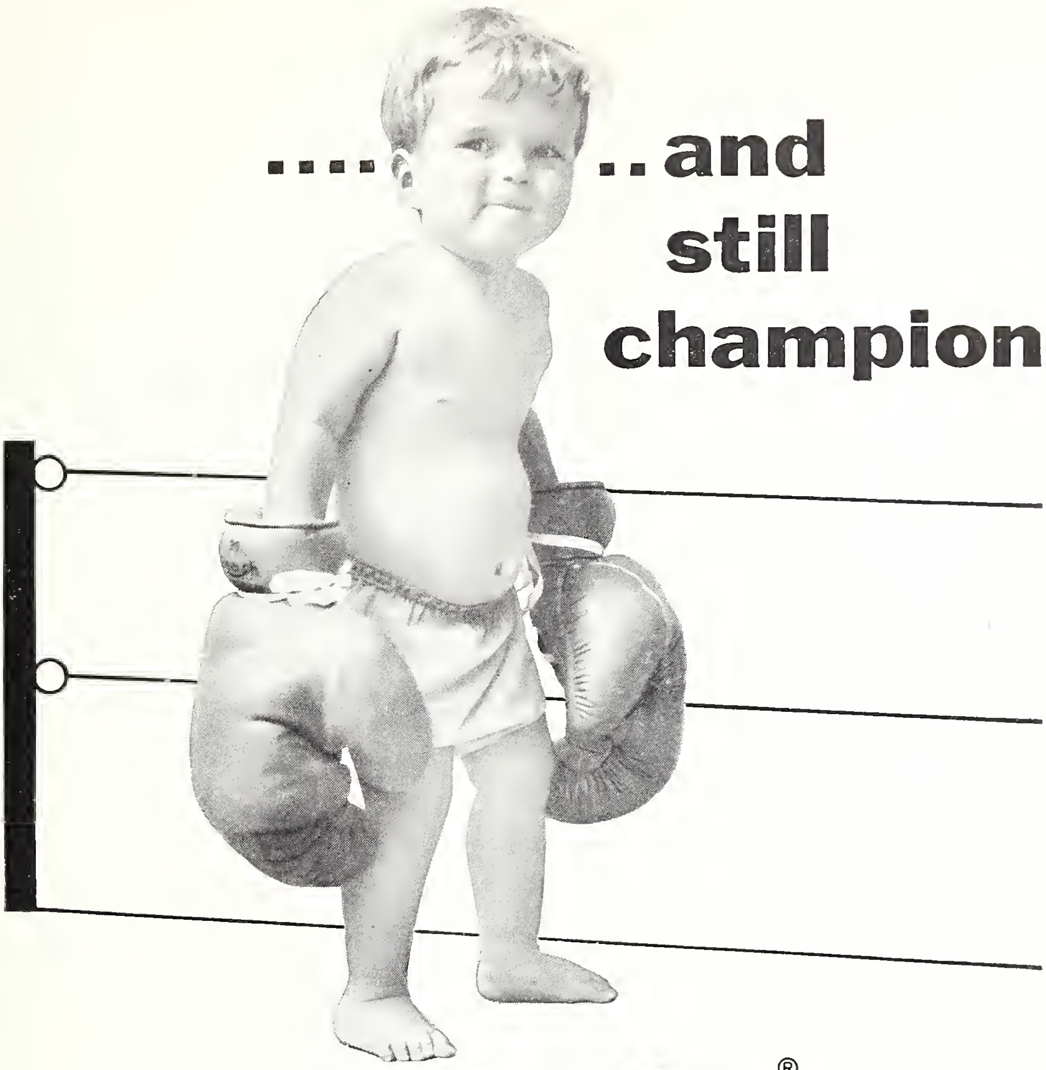
Guest Speakers—10

Hallenbeck, George A., Rochester, Minn.
Herrell, Wallace E., Lexington, Ky.
Julian, Ormand C., Chicago, Ill.
Kinsell, Laurance W., Oakland, Calif.
Manchester, Benjamin, Washington, D. C.
Motley, Hurley L., Los Angeles, Calif.
Newton, Michael, Jackson, Miss.
Orr, Louis M., Orlando, Fla.
Peck, Franklin Bruce, Sr., Indianapolis, Ind.
Stamler, Jeremiah, Chicago, Ill.

Guest Physicians—59

Allen, Herbert L., Alton, Ill.
Alonso-Yague, P., Fulton
Ater, David H., Collinsville, Ill.
Baldree, C. E., Jr., Belleville, Ill.
Barker, Nelson W., Rochester, Minn.
Beaudoin, R. J., St. Louis
Beechwood, E. C., St. Louis
Benjamin, Richard D., St. Louis
Bossingham, Earl N., Clarinda, Iowa
Bradham, Eloise A., St. Louis
Calhoun, Kenneth M., Bloomington, Ill.
Carpenter, E. M., Lebanon
Carron, J., St. Louis
Chandrasekar, St. Louis
Chester, Robert, Columbia
Coppo, Julio, St. Louis
Chiares, Nicholas J., St. Louis
Davis, Gerald N., St. Louis
Donnelly, Bernard A., Alton, Ill.
Dubuque, T. J., Jr., St. Louis
Dundon, Gerard, Columbia, Ill.
Farris, H. G., Normandy
Foreman, P. B., St. Louis
Forsee, James H., Washington, D. C.
Garnier, William H., Stillwater, Okla.
Gervais, Henry, St. Louis
Gross, Gilbert, South Euclid, Ohio
Hamm, Lee N., Lincoln, Ill.
Hector, Fernandez, St. Louis
Hector, Howard, St. Louis
Hines, Kenneth, Florissant
Hoenig, Howard, St. Louis
Howard, Stanley P., Waco, Tex.
Howe, Albert L., Brentwood
Karelos, Demetrio, St. Louis
Kawasaki, Masashi, St. Louis
Kennedy, William J., St. Louis
Ludwig, A. S., St. Louis
McCool, James F., Jr., St. Louis
McCurry, J. Cash, Ark.
Mullins, J. E., St. Louis
Matthew, A. Nue, Homewood, Ill.
O'Sullivan, Daniel F., St. Louis
Parekh, R. G., St. Louis
Patton, William G., St. Louis
Powell, Martin A., Carbondale, Ill.
Poznanski, Thomas, St. Louis
Quick, Richard T., St. Louis
Reynolds, John R., Webster Groves
Russell, David, Jasper, Ark.
Simpson, Reed, Sheboygan, Wisc.
Stein, Robert J., St. Louis
Sturim, Howard S., F.P.O., N. Y.
Sutton, Richard L., Jr., Kansas City
Utley, James H., St. Louis
Weber, Carl, Sheboygan, Wisc.
Wells, J. P., Jefferson City
Whitener, Miles C., St. Louis
Williams, Maybelle, Alton, Ill.

There were registered 224 exhibitors, 153 Woman's Auxiliary, 105 medical technicians, 44 guests and 618 physicians. Total Registration 1,144.



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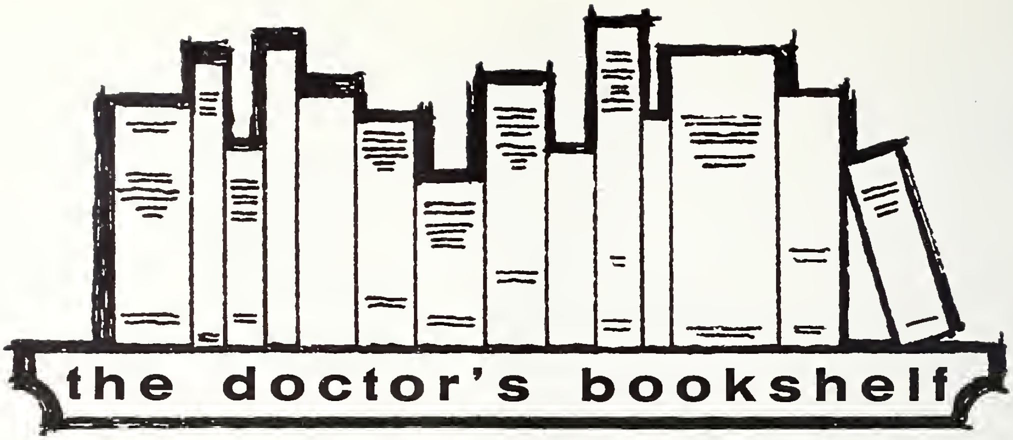

the doctor's bookshelf

BOOK REVIEWS

Surgery of the Foot, by Henri L. DuVries, M.D., Clinical Instructor in Surgery, Chicago Medical School; Attending Surgeon, Columbus Hospital, Mother Cabrini Hospital, and Frank Cuneo Hospital; Chairman, Department of Surgery, Illinois College of Chiropody and Foot Surgery, Chicago. Foreword by Karl A. Meyer, M.D. Introduction by Edward L. Compere, M.D. The C. V. Mosby Company, St. Louis. 1959. Price $12.50.

This is a new book on a new subject by a new type of specialist.

As Karl A. Meyer, M.D., in the foreword, points out that it is unusual for a man to dedicate his surgical career to such a limited field as common disorders of the foot. Yet, that is what Dr. DuVries has done. For 30 years he has devoted his time and energies to a better understanding of foot disabilities. His book is the result of this experience. The format of this book is pleasing, which makes it easy to read. It is attractively illustrated on glossy paper by well reproduced x-rays, diagrammatic drawings and good black and white photographs.

The book begins with a chapter on the function of the foot. Chapter 2 is on diagnosis and explanations of the patient's symptoms. Included in the equipment he considers necessary for an adequate examination, he lists a jeweler's eye glass, through which minute defects may be detected. He also recommends a foot skeleton for comparison studies at x-ray readings.

General surgical principles are discussed with many common sense suggestions. Each chapter is well appended by a bibliography.

The surgical treatment of each given subject is presented in a rather novel style which lends authority to the overall text. First, abnormal anatomy and physiology are presented usually with excellent diagrams or x-rays. Then a thumbnail sketch of the accepted surgical solutions for the problem, particularly where the solutions (as in the case of bunions) may be multiple, and no one single procedure standard. Each major technic is well illustrated. The author then gently evaluates the preceding operative technics by describing in great detail his method of handling the same situation.

One glaring omission is the subject of "gout." Only two words are devoted to it. Apparently, the author has had little experience with operations on gouty feet. It would have been better still, had a section on when not to operate on gouty feet been included.

This book is what it says it is: "Surgery of the Foot." It is not cluttered up with chapters on the treatment of the foot by arch supports. It is a volume that should be in the reference library not only of all orthopedic surgeons, but also of both general and plastic surgeons, who aspire to foot surgery. G. P.

BOOKS RECEIVED

Observations on Direct Analysis, The Therapeutic Technique of Dr. John N. Rosen, by Morris W. Brody, M.D., with foreword by John N. Rosen, M.D., and O. Spurgeon English, M.D. Vantage Press, New York, Washington, Hollywood, 1959. Price $2.95.

The Emergency Syndromes in Pediatric Practice, by Alfred J. Vignec, M.D., Clinical Professor of Pediatrics, New York University, College of Medicine, New York, N. Y.; Medical Director and Pediatrician in Chief, New York

(Continued on page 906)

101
glorious ways
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Foundling Hospital, New York, N. Y.; Director of Pediatric Division, St. Vincent's Hospital, New York, N. Y. Landsberger Medical Books, Inc., New York, 1959. Price $9.00.

The Physician and the Law, by Rowland H. Long, Member Massachusetts and New York Bars, Assistant Professor in Forensic Medicine, New York University Post-Graduate Medical School. Foreword by Milton Helpern, M.D., Chief Medical Examiner, New York City. Appleton-Century-Crofts, Inc., New York, 1959. Price $5.95.

The Acute Medical Syndromes and Emergencies, Diagnosis and Treatment, by Albert Salisbury Hyman, M.D., Associate Clinical Professor of Medicine, New York Medical College, New York, N. Y., with the collaboration of Samuel Weiss, M.D., Professor of Gastroenterology Emeritus, New York Polyclinic Medical School, New York; George Guttmann Ornstein, M.D., Associate Clinical Professor of Medicine, New York Medical College, New York; Howard F. Root, M.D., Medical Director, Joslin Clinic, Boston, Massachusetts; Anna Ruth Spiegelman, M.D., Assistant Professor Clinical Medicine, New York University Postgraduate Medical School, New York; Jack Abry, M.D., Associate Attending Physician, New York City Hospital, Elmhurst, N. Y. Landsberger Medical Books, Inc., New York, 1959. Price $8.75.

Babies by Choice or by Chance, by Alan F. Guttmacher, M.D. Doubleday & Company, Inc., Garden City, New York, 1959. Price $3.95.

Ciba Foundation Tenth Anniversary Symposium on Significant Trends in Medical Research. Editors for the Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P.; Cecilia M. O'Connor, B.S., and Maeve O'Connor, B.A. Little, Brown and Company, Boston, 1959. Price $9.50.

Communicable and Infectious Diseases: Diagnosis, Prevention, Treatment, by Franklin H. Top, M.D., Professor and Head, Department of Hygiene and Preventive Medicine, State University of Iowa, Iowa City, Iowa; Director, University Department of Health, and Director, Institute of Agricultural Medicine, State University of Iowa; Consulting Director State (of Iowa) Hygienic Laboratories; Consultant in Infectious Diseases, University Hospital, Iowa City, Iowa; Consultant, Communicable Disease Center, U. S. Public Health Service, Atlanta, Ga. Fourth Edition. The C. V. Mosby Company, St. Louis, 1960. Price $20.00.

Ciba Foundation Symposium on Biochemistry of Human Genetics. Editors for the Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P., and Cecelia M. O'Connor, B.S. Little, Brown and Company, Boston, 1959. Price $9.50.

Ciba Foundation Colloquia on Ageing, Volume 5, The Lifespan of Animals. Editors for the Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P., and Maeve O'Connor, B.A. Little, Brown and Company, Boston, 1959. Price $9.50.

Current Therapy—1960, Latest Approved Methods of Treatment for the Practicing Physician, Edited by Howard F. Conn, M.D., and Consulting Editors, George E. Burch, M. Edward Davis, Vincent J. Derbes, Garfield G. Duncan, Hugh J. Jewett, Clarence S. Livingood, Perrin H. Long, H. Houston Merritt, Walter L. Palmer, Hobart A. Reimann, Ralph Wayne Rundles, and Robert H. Williams, W. B. Saunders Company, Philadelphia & London, 1960. Price $12.00.

Manual of Skin Diseases, by Gordon C. Asuer, M.D., Assistant Clinical Professor of Medicine (Dermatology) and Chief of the Section of Dermatology, University of Kansas School of Medicine; Attending Physician, General Hospital, Kansas City, Mo.; Consultant, U. S. Army Hospital, Fort Leavenworth, Kansas. J. B. Lippincott Company, Philadelphia & Montreal, 1959. Price $9.75.

On the History of Medicine, by Henry E. Sigerst. Edited and with an Introduction by Felix Marti-Ibanez, M.D., Professor and Chairman, Department of the History of Medicine, New York Medical College, Flower and Fifth Avenue Hospitals, New York; Editor-in-Chief, *MD Medical News* magazine. Foreword by John F. Fulton, M.D., Department of the History of Medicine, Yale University School of Medicine. MD Publications, Inc., New York, 1960. Price $6.75.

Organization

AMERICAN MEDICAL ASSOCIATION

President, E. Vincent Askey, M.D., Los Angeles, Calif.
Clinical Meeting, Washington, D. C., Nov. 28-Dec. 2.
Annual Meeting, New York City, June 26-30, 1961.

MISSOURI STATE MEDICAL ASSOCIATION

103rd Annual Session, Kansas City

March 18-21, 1961

President, R. O. Muether, St. Louis.
President-Elect, J. H. Summers, Lebanon.
Vice Presidents, Robert B. Bassett, St. Louis; Thomas S. Fleming, Moberly; Claude J. Hunt, Kansas City.
Secretary, John I. Matthews, Jefferson City.
Treasurer-Editor, Charles R. Doyle, St. Louis.
Speaker of the House of Delegates, O. P. Hampton, University City; Vice Speaker, William C. Mixson, Kansas City.
Field Secretary, Ray McIntyre, St. Louis.
Assistant Editor, Helen Penn, St. Louis.
Executive Secretary, Tom R. O'Brien, 623 Missouri Theatre Bldg., 634 N. Grand Blvd., St. Louis 3.

Delegates to the American Medical Association

Richard H. Kiene, Kansas City; alternate, Rolla B. Wray, Nevada. A. W. Neilson, St. Louis; alternate, Robert Kelley, St. Louis, 1960-1961. Durward G. Hall, Springfield; alternate, Guy N. Magness, University City. H. E. Petersen, St. Joseph; alternate, J. Loren Washburn, Versailles, 1961-1962.

Standing Committees

Scientific and Postgraduate Work—John I. Matthews, Jefferson City, Chairman (1963); Gerald L. Miller, Kansas City (1963); M. Pinson Neal, Columbia (1962); John A. Growdon, Kansas City (1961); James G. Janney, St. Louis (1961). **Associate Members**—Melvin C. Kasten, Cape Girardeau; Wyeth Hamlin, Hannibal; Kenneth K. Keown, Columbia; Robert W. Smith, Marceline; John A. Nuetzel, Clayton.

Defense—C. E. Hyndman, St. Louis, Chairman (1963); Roland S. Kieffer, St. Louis (1962); W. W. Gist, Kansas City (1962); L. P. Forgrave, St. Joseph (1961); Ronald F. Elkins, Springfield (1961).

Public Policy and Public Relations—Ben M. Bull, Ironton, Chairman; C. C. Cohrs, Moberly; R. J. Crider, St. Charles; Rolla B. Wray, Nevada; Floyd C. Atwell, Kansas City; C. B. Schoeberl, Joplin; H. W. Carrington, Lebanon; E. D. Imes, Maryville; R. R. Lyle, Versailles.

Medical Education and Hospitals—Kenneth Glover, Mount Vernon, Chairman (1962); William A. Knight, Jr., St. Louis (1962); George J. L. Wulff, University City (1961); Doyle C. McCraw, Bolivar (1961); Ralph Perry, Kansas City (1963).

Cancer—Marvin L. Napper, Springfield, Chairman (1961); John J. Modlin, Columbia (1961); George A. Carroll, St. Louis (1962); E. Kip Robinson, Kansas City (1962); Joseph L. Fisher, St. Joseph (1963). **Associate Members**—John E. Lamy, Sedalia; Charles E. Lockhart, Springfield; Henry C. Allen, St. Louis; James R. McVay, Jr., Kansas City.

Medical Economics—A. P. Rowlette, Moberly, Chairman (1961); George L. Hawkins, St. Louis (1962); John R. Forgrave, St. Joseph (1961); Martin Hunter, Kansas City (1963); G. W. Winn, Boonville (1962).

Mental Health—James N. Haddock, Webster Groves, Chairman; Robert J. Mueller, St. Louis; Henry V. Guhleman, Jefferson City; George W. Forman, St. Joseph; D. R. Edwards, Sedalia; A. L. Brown, Springfield; Frank M. Grogan, St. Louis; Albert Preston, Kansas City; N. Venay Bolin, Kansas City; James M. A. Weiss, University City.

Maternal Welfare—James E. Keeler, Kansas City, Chairman (1961); William B. See, Columbia (1962); E. E. Wadlow, St. Joseph (1962); Joseph M. Krebs, St. Louis (1961); Irwin T. Craig, Joplin (1963). **Associate Members**—P. V. Siegel, Smithton; H. C. Willumson, St. Joseph; A. C. Trueblood, St. Louis; Paul E. Kratz, Cape Girardeau; J. J. Wimp, Kirksville; MacDonald Bonebrake, Springfield; Eugene G. Hamilton, St. Louis; A. B. Sinclair, Kansas City.

Infant and Child Care—E. J. Schwartz, Springfield, Chairman; Daniel B. Landau, Hannibal; H. E. Petersen, St. Joseph; R. J. LaDriere, St. Louis; Guy N. Magness, University City; Clement E. Brooke, Columbia; James J. Pascoe, Nevada; Jack N. Wiles, West Plains; James A. Kinder, Cape Girardeau; S. F. Cockerell, Independence.

Health and Public Instruction—J. R. McDaniel, St. Joseph, Chairman (1963); Roy A. Walther, Overland (1962); F. H. Hartwig, Kansas City (1962); J. Earl Smith, St. Louis (1961); E. A. Belden, Jefferson City (1963). **Associate Members**—Chester R. Peck, Kennett; John P. Mabrey, Plattsburg; C. Howe Eller, St. Louis.

Constitution and By-Laws—W. A. Bloom, Fayette, Chairman (1963); H. M. Parker, Kansas City (1962); Charles E. Martin, St. Louis (1962); John F. Rutledge, Crystal City (1961); W. F. Francka, Hannibal (1961).

Trauma—Robert E. Funsch, University City, Chairman (1961); Paul W. Meyer, Kansas City (1962); Lee T. Ford, St. Louis (1962); Alan C. McAfee, St. Louis (1963); Thomas G. Otto, Cape Girardeau (1963). **Associate Members**—Howard McAlhaney, Springfield; Otis E. James, Kansas City; Grafton A. Smith, Columbia.

Committee on Eye Health—John McLeod, Kansas City, Chairman (1962); H. B. Stauffer, Jefferson City (1962); T. E. Sanders, St. Louis (1961); H. B. Ivy, Springfield (1961); Paul G. Wolff, Cape Girardeau (1963). **Associate Members**—Dick H. Underwood, Kansas City; Leslie C. Drews, St. Louis; Michael F. Pernoud, St. Louis; D. E. Eggleston, Macon; W. L. Post, Joplin; Robert S. Minton, St. Joseph; Vernon B. Jackson, Fulton.

Laboratory Medicine—Fred C. Coller, Springfield, Chairman (1963); Hollis N. Allen, St. Louis (1962); Joseph E. Flynn, Columbia (1962); T. J. Cooper, St. Louis (1963); Angelo Lapi, Kansas City (1961).

Industrial Health—H. M. Roebber, Bonne Terre, Chairman (1963); S. W. Scorse, Joplin (1962); Vencel W. Hollo, St. Louis (1961); William H. Duncan, Kansas City (1961); Douglas A. Ries, Richmond Heights (1963). **Associate Members**—James W. Clawson, Springfield; C. Rush McAdam, St. Louis; Richard A. Sutter, University City.

Diabetes—H. E. Oppenheimer, Clayton, Chairman (1963); Lucien W. Ide, St. Joseph (1962); J. Bruce Lemmon, Springfield (1961); H. M. Gilkey, Kansas City (1961); Charles M. Lamke, Columbia (1963). **Associate Members**—William H. Olmsted, St. Louis; Robert E. Koch, Clayton; Ralph W. Casford, Kansas City; J. H. Walterscheid, Hannibal.

Anesthesiology—Russell D. Shelden, Kansas City, Chairman (1961); E. O. Kraft, St. Louis (1962); O. T. Blanke, Joplin (1961); Walter W. Tillman, Springfield (1963); Carl K. Ness, St. Joseph (1963).

Hospital and Professional Relations—Hollis N. Allen, St. Louis, Chairman (1961); Victor B. Buhler, Kansas City (1962); W. S. Sewell, Springfield (1961); Stanley S. Peterson, Springfield (1963); Ralph Perry, Kansas City (1963). **Associate Members**—W. F. Francka, Hannibal; Willard Bartlett, St. Louis.

Control of Venereal Disease—Edwin M. Powell, Springfield, Chairman (1962); T. E. McMillan, Kansas City (1962); E. M. Cannon, St. Louis (1961); A. W. Neilson, St. Louis (1961); Robert B. Bristow, St. Joseph (1963). **Associate Member**—John E. Byrne, St. Louis.

Physical Medicine and Rehabilitation—D. Elliott O'Reilly, St. Louis, Chairman (1961); F. D. Sunastrom, Springfield (1962); William J. Stewart, Columbia (1962); F. O. Tietjen, Jefferson City (1961); Robert H. Fitzgerald, Independence (1963). **Associate Member**—Otakar Machek, St. Louis.

Civil Defense Medical Disaster Care—Carl D. Siegel, Sedalia, Chairman; M. P. Leech, Fayette; H. D. Steinbeck, Union; Carroll P. Hungate, Kansas City; John R. Forgrave, St. Joseph; J. M. Canella, Hannibal; Curtis H. Lohr, Clayton; R. Ned White, Springfield; George E. Thoma, St. Louis; George L. Watkins, Farmington; O. P. Hampton, University City.

Aging—Stanley S. Peterson, Springfield, Chairman; Ralph Perry, Kansas City; Rolla B. Wray, Nevada; Louis H. Kohler, St. Louis; C. Thorpe Ray, Columbia; Robert Kingsland, Clayton.

Special Committees

Tuberculosis—Florence E. MacInnis, Kansas City, Chairman; Paul Murphy, St. Louis; H. M. Roberts, Kansas City; Joseph L. Lucido, St. Louis; Walter C. Gray, St. Louis; David N. Kerr, St. Louis; Glenn O. Turner, Springfield; Carl G. Popp, Sikeston (1961).

Study of Cardiac Disease—Earl L. Loyd, Jefferson City, Chairman; E. Lee Shrader, St. Louis; William I. Park, Springfield; William J. Shaw, Sr., Fayette; Jack M. Martt, Columbia; Martin P. Hunter, Kansas City; William J. Gillespie, St. Louis; Caryl A. Potter, St. Joseph; F. J. Biggs, Poplar Bluff (1961).

Rural Medical Service—Jack Mullen, Bonne Terre, Chairman; E. L. Niedermeyer, Tarkio; K. S. Latham, California; B. J. Bass, Salem; John F. Pearl, St. Clair; F. A. Barnett, Paris; Charles A. Worley, Sweet Springs; Fred L. Wommack, Crane (1961).

American Medical Education Foundation—James P. Murphy, St. Louis, Chairman; Hugh E. Stephenson, Columbia; William T. McNew, Carthage; Russell D. Shelden, Kansas City; Allen I. Herman, St. Joseph (1961).

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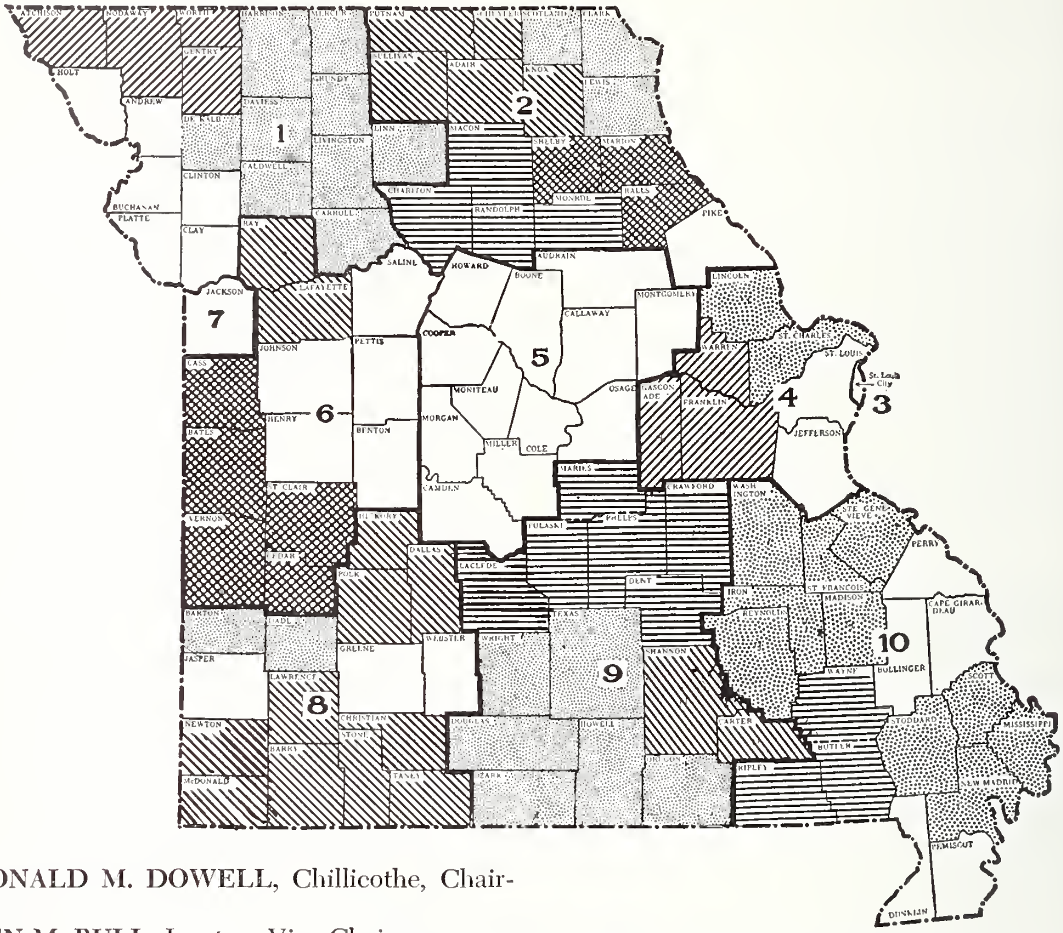
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ATCHISON
NODAWAY
WORTH
HARRISON
MERCER
PUTNAM
SCHUYLER
SCOTLAND
CLARK
HOLT
GENTRY
SULLIVAN
ADAIR
KNOX
LEWIS
ANDREW
GRUNDY
DAVIESS
DE KALB
LINN
MACON
SHELBY
MARION
LIVINGSTON
CALDWELL
CLINTON
CHARITON
MONROE
RALLS
BUCHANAN
PLATTE
CARROLL
RANDOLPH
PIKE
CLAY
RAY
AUDRAIN
SALINE
HOWARD
BOONE
LINCOLN
JACKSON
LAFAYETTE
MONTGOMERY
CALLAWAY
COOPER
ST. CHARLES
WARREN
ST. LOUIS
St. Louis City
JOHNSON
PETTIS
CASS
MONITEAU
OSAGE
GASCONADE
FRANKLIN
HENRY
BENTON
MORGAN
MILLER
COLE
JEFFERSON
BATES
MARIES
CAMDEN
ST. CLAIR
CRAWFORD
WASHINGTON
STE. GENEVIEVE
HICKORY
PULASKI
PHELPS
VERNON
DALLAS
PERRY
CEDAR
POLK
LACLEDE
DENT
IRON
ST. FRANCOIS
MADISON
CAPE GIRARDEAU
BARTON
DADE
TEXAS
REYNOLDS
JASPER
GREENE
WEBSTER
WRIGHT
SHANNON
WAYNE
BOLLINGER
LAWRENCE
NEWTON
CHRISTIAN
DOUGLAS
HOWELL
CARTER
STODDARD
SCOTT
MISSISSIPPI
STONE
BARRY
BUTLER
McDONALD
TANEY
OZARK
OREGON
RIPLEY
NEW MADRID
PEMISCOT
DUNKLIN

DONALD M. DOWELL, Chillicothe, Chairman.

BEN M. BULL, Ironton, Vice Chairman.

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Fifth District: Councilor, Byron M. Stuart, Boonville. Counties: Audrain, Boone, Callaway, Camden, Cole, Cooper, Howard, Miller, Moniteau, Montgomery, Morgan, *Osage.*

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Seventh District: Councilor, Kenneth C. Hollweg, Kansas City. County: Jackson.

Eighth District: Councilor, W. W. Tillman, Springfield. Counties: Barry, Barton, Christian, Dade, Dallas, Greene, Hickory, Jasper, Lawrence, McDonald, Newton, Polk, Stone, Taney, Webster.

Ninth District: Councilor, E. A. Stricker, St. James. Counties: Carter, Crawford, Dent, Douglas, Howell, Laclede, Maries, Oregon, Ozark, Phelps, Pulaski, Shannon, Texas, Wright.

Tenth District: Councilor, Ben M. Bull, Ironton. Counties: *Bollinger,* Butler, Cape Girardeau, Dunklin, Iron, Madison, Mississippi, New Madrid, Pemiscot, Perry, Reynolds, Ripley, St. Francois, Ste. Genevieve, Scott, Stoddard, Washington, Wayne.

Shaded areas show hyphenated component societies. Counties listed in italics are unorganized.

Component Societies in Affiliation With The Missouri State Medical Association

County	District	President	Address	Secretary	Address
Andrew	1	V. R. Wilson	Rosendale	M. L. Holliday	Fillmore
Audrain	5	Wm. H. Jolly	Mexico	Ned D. Rodes	Mexico
Barton-Dade	8	Elmer Taylor	Lockwood	Thos. W. Carroll	Lamar
Benton	6	T. S. Reser	Cole Camp	James A. Logan	Warsaw
Boone	5	John J. Modlin	Columbia	E. L. Washington	Columbia
Buchanan	1	Thompson E. Potter	St. Joseph	William B. Rost	St. Joseph
Butler-Ripley-Wayne	10	B. M. McLain	Poplar Bluff	E. T. Hansbrough	Poplar Bluff
Callaway	5	James E. Hill	Fulton	Vernon B. Jackson	Fulton
Camden	5				
Cape Girardeau	10	H. D. Ridings	Cape Girardeau	E. Johnson	Cape Girardeau
Carter-Shannon	9	H. D. Rollins	Winona		
Chariton-Macon-Monroe-Randolph	2	Howard Miller	Macon	Josephine Baker	Moberly
Clay	1	James W. Willoughby	Liberty	R. D. Dwyer	N. Kansas City
Clinton	1	W. B. Spaulding	Plattsburg	J. P. Mabrey	Plattsburg
Cole	5	Marshall Kelly	Jefferson City	C. Stuart Exon	Jefferson City
Cooper	5	Vernon D. Friedrichs	Pilot Grove	T. C. Beckett	Boonville
Dallas-Hickory-Polk	8	Geo. G. Robinson	Humansville	Mary E. P. Griffin	Buffalo
Dunklin	10	Chas. S. Williams	Malden	E. L. Spence	Kennett
Franklin-Gasconade-Warren	4	Paul A. Brenner	Owensville	William Richardson	Union
Grand River Medical Society (Caldwell-Livingston-Carroll-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb)	1	Robert W. Smith	Marceline	B. D. Howell	Brookfield
Greene	8	W. W. Tillman, Jr.	Springfield	F. T. H'Doubler, Jr.	Springfield
Henry	6	Richard King	Clinton	R. S. Hollingsworth	Clinton
Howard	5	M. P. Leech	Fayette	W. J. Shaw	Fayette
Jackson	7	John F. Bowser	Kansas City	Walter J. Stelmach	Kansas City
Jasper	8	Irwin T. Craig	Joplin	David Allen	Joplin
Jefferson	4	Harry Yoskit	Festus	Frank L. Kozal	Crystal City
Johnson	6	Keith D. Jones	Warrensburg	T. Reed Maxson	Warrensburg
Lafayette-Ray	6	Walter E. Koppenbrink	Higginsville	Thomas B. Cook	Richmond
Lewis-Clark-Scotland	2	J. R. Bridges	Kahoka	Landon Y. Davis	Canton
Lincoln-St. Charles	4	Wm. H. Poggemeier	St. Charles	P. H. Rother	St. Charles
Marion-Ralls-Shelby	2	J. H. Walterscheid	Hannibal	Wyeth Hamlin	Hannibal
Mid-Missouri County Medical Society (Phelps-Crawford-Dent-Pulaski-Maries-Laclede)	9	A. R. Bauman	Steelville	M. K. Underwood	Rolla
Miller	5			Carl T. Buehler	Eldon
Mineral Area County Medical Society (St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve	10	Marvin T. Haw	Bonne Terre	George L. Watkins, Jr.	Farmington
Moniteau	5	K. S. Latham	California	L. M. Gallagher	California
Montgomery	5	E. J. T. Andersen	Montgomery City	Samuel J. Byland	Wellsville
Morgan	5	Robert R. Lyle	Versailles	Ruth Kauffman	Versailles
Nodaway-Holt-Atchison-Gentry-Worth	1	Isaac F. Sweaney	Oregon	Robert E. Dunshee	Maryville
North Ceneral Counties Medical Society (Adair-Schuyler-Knox-Sullivan-Putnam)	2	Spencer L. Freeman	Kirksville	Paul E. Hilton	Kirksville
Ozarks Medical Society (Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald	8	H. C. Sweany	Mount Vernon	A. J. Graves	Mount Vernon
Pemiscot	10	P. J. Aquino	Caruthersville	John K. Duckworth	Hayti
Perry	10	Stanley Legner	Perryville	A. E. McDermott	Perryville
Pettis	6	Don C. Proctor	Sedalia	R. W. Lemire	Sedalia
Pike	2	Charles H. Lewellen	Louisiana	Roger F. Christensen	Louisiana
Platte	1	H. Graham Parker	Platte City	H. C. Thurman	Parkville
St. Louis City	3	Paul F. Max	St. Louis	Charles S. Sherwin	St. Louis
St. Louis	4	Jos. B. Kendis	St. Louis	Robert Hughes	Creve Coeur
Saline	6	E. Lee McCorkle	Marshall	R. W. Blalock	Marshall
Semo County Medical Society (Stoddard-New Madrid-Mississippi-Scott)	10	John Dernoncourt	Charleston	Thelma C. Buckthorpe	Sikeston
South Central Counties Medical Society (Howell-Oregon-Texas-Wright-Douglas-Ozark)	9	J. L. Spears	Cabool	Rollin H. Smith	West Plains
Webster	8	C. R. Macdonnell	Marshfield	E. G. Beers	Seymour
West Central Missouri Medical Society (Bates-Cass-Cedar-St. Clair-Vernon	6	James J. Pascoe	Nevada	Carter Luter	Butler

Towns and Counties

A

Adrian, Bates County
Affton, St. Louis County*
Albany, Gentry County
Altenburg, Perry County
Appleton City, St. Clair County
Aurora, Lawrence County
Ava, Douglas County

B

Bakersfield, Ozark County
Ballwin, St. Louis County*
Barnard, Nodaway County
Belton, Cass County
Berkeley, St. Louis County*
Bethany, Harrison County
Bloomfield, Stoddard County
Blue Springs, Jackson County
Bolivar, Polk County
Bonne Terre, St. Francois County
Boonville, Cooper County
Bourbon, Crawford County
Bowling Green, Pike County
Branson, Taney County
Braymer, Caldwell County
Brentwood, St. Louis County*
Bridgeton, St. Louis County*
Brookfield, Linn County
Browning, Linn County
Brunswick, Chariton County
Buffalo, Dallas County
Butler, Bates County

C

Cabool, Texas County
Cainsville, Harrison County
California, Moniteau County
Camdenton, Camden County
Cameron, Clinton County
Campbell, Dunklin County
Canton, Lewis County
Cape Girardeau, Cape Girardeau County
Cardwell, Dunklin County
Carl Junction, Jasper County
Carrollton, Carroll County
Carthage, Jasper County
Caruthersville, Pemiscot County
Cassville, Barry County
Centralia, Boone County
Chaffee, Scott County
Charleston, Mississippi County
Chesterfield, St. Louis County*
Chillicothe, Livingston County
Clayton, St. Louis County*
Clinton, Henry County
Coatsville, Schuyler County
Columbia, Boone County
Concordia, Lafayette County
Crane, Stone County
Creve Coeur, St. Louis County*
Crystal City, Jefferson County
Cuba, Crawford County

D

Desloge, St. Francois County
DeSoto, Jefferson County
Dexter, Stoddard County
Doniphan, Ripley County
Drexel, Cass County

E

East Prairie, Mississippi County
Edgerton, Platte County
Edina, Knox County
Eldon, Miller County
El Dorado Springs, Cedar County
Elsberry, Lincoln County
Eureka, St. Louis County*
Everton, Jackson County
Excelsior Springs, Clay County

F

Farmington, St. Francois County
Faucett, Buchanan County
Fayette, Howard County
Fenton, St. Louis County*
Ferguson, St. Louis County*
Festus, Jefferson County
Fillmore, Andrew County
Flat River, St. Francois County
Florissant, St. Louis County*
Forsyth, Taney County
Fort Leonard Wood, Phelps County
Fredericktown, Madison County
Frontenac, St. Louis County*
Fulton, Callaway County

G

Gallatin, Daviess County
Gashland, Clay County
Gideon, New Madrid County
Glasgow, Howard County
Glendale, St. Louis County*
Gordonville, Cape Girardeau County
Grandview, Jackson County
Grant City, Worth County
Gravois Mills, Jackson County
Greenfield, Dade County
Green Ridge, Pettis County

H

Hamilton, Caldwell County
Hannibal, Marion County
Harrisonville, Cass County
Hartville, Wright County
Hayti, Pemiscot County
Herculaneum, Jefferson County
Hermann, Gasconade County
Hickman Mills, Jackson County
Higginsville, Lafayette County
Hillsboro, Jefferson County
Holden, Johnson County
Hopkins, Nodaway County
Hornersville, Dunklin County
Houston, Texas County
Houstonia, Pettis County
Humansville, Polk County
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I

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Ironton, Iron County

J

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Jennings, St. Louis County*
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L

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M

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Bumgarner, Roger, W., Columbia
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C

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Clark, James F. W., Jr., St. Louis
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Clary, William F., Springfield
Clasen, Arthur C., Miami Beach, Fla.
(Member Jackson County)
Clawson, James W., Springfield
Clay, Hampson S., Poplar Bluff
Clayton, Edgar L., Springfield
Cleary, Frank, St. Louis
Cleveland, Horace F., Long Beach, Calif.
(Member St. Louis Medical Society)
Cline, Edward W., Poplar Bluff
Cline, Harold H., Piedmont
Cline, Merle A., Kansas City
Clisham, John F., St. Louis
Clithero, W. H., St. Louis
Coates, Thomas A., St. Louis
Coburn, Donald F., Kansas City
Cochran, Jo R., Cape Girardeau
Cochran, Thomas E., Jr., Springfield
Cochrane, Joseph J., Kansas City
Cockerell, Sanford F., Independence
Coffee, Amos L., Willow Springs
Coffey, Ralph R., Kansas City
Coffin, Ernest L., Lakeworth, Fla.
(Member St. Louis Medical Society)
Coffin, Theodore A., Kansas City
Coffman, Esther E. L., Lakeworth, Fla.
(Member Ozarks Counties)
Cohen, Benjamin H., Clayton
Cohen, Frank, St. Ann
Cohen, Harry K., Kansas City
Cohen, Hilliard, Kansas City
Cohen, Louis, St. Louis
Cohle, Richard R., Carthage
Cohnberg, Rosellen E., Monett
Cohrs, Clarence C., Moberly
Coil, Paul E., Mexico
Colbert, James W., Jr., St. Louis
Coldwater, Kenneth B., St. Louis
Cole, William R., St. Louis
Coleman, William G., St. Louis
Colglazier, Mary C., Kansas City
Coller, Frederick C., Springfield
Collins, Gretchen D., Macon
Collins, Jo E., Joplin
Collins, John M., St. Louis
Collodi, George A., Brentwood
Colom, George A., Kansas City
Comboy, Lawrence J., Independence
Comeau, Richard A., Dexter
Comens, Phillip, St. Louis
Comens, Ruth C., St. Louis
Commerford, James J., Crystal City
Commerford, John F., St. Charles
Compton, James R., Whittier, Calif.
(Member St. Louis County)
Cone, Alfred J., Chesterfield
Connell, Evan S., Kansas City
Connor, Samuel W., Mountain Grove
Conover, Charles C., Kansas City
Conrad, Adolph H., Jr., St. Louis
Conrad, Joseph A., Chillicothe
Conrad, Marshall B., Clayton
Conrad, Raymond C., Springfield
Cook, Jerome E., St. Louis
Cook, Oliver W., Caruthersville
Cook, Ralph L., University City
Cook, Thomas B., Richmond
Cooke, James K., Jr., Cecil Field, Fla.
(Member Pemiscot County)
Cooper, Charles S., Kansas City
Cooper, Claude W., Thayer
Cooper, Henry T., St. Louis
Cooper, John H., Kansas City
Cooper, Lawrence E., Ft. Myers, Fla.
(Member Pemiscot County)
Cooper, Leo F., Kansas City
Cooper, Maurice E., Columbia
Cooper, R. Lee, Warrensburg
Cooper, Thomas J., St. Louis
Cope, James C., Columbia
Cope, Joseph S., Lexington
Copher, Glover H., St. Louis
Copp, Ralph, Jr., St. Louis
Cordonnier, Justin, St. Louis
Correnti, Nicholas A., St. Louis
Cortner, Mary C., Kansas City
Cossins, Carlos E., St. Joseph
Costa, Dominic V., St. Louis
Costello, Cyril J., St. Louis
Costello, Joseph P., St. Louis
Costello, Joseph P., Jr., Brentwood
Costen, James B., St. Louis
Costrino, John J., University City
Costrino, Joseph A., St. Louis
Coughlin, Bertrand D., St. Louis
Coulter, Robert L., Jr., St. Louis
Counsell, Chester M., Kansas City
Cowan, R. D., Aurora
Cowan, Watt O., Greenfield
Cowdry, Edmund V., Jr., St. Louis
Cowherd, Joseph B., Kansas City
Cox, Kenneth E., Kansas City
Cox, Mary E., St. Louis
Cox, William A., Jefferson City
Cox, William L., Liberty
Coxe, William S., St. Louis
Craig, Irwin T., Joplin
Craig, Owen W. D., St. Joseph
Cramb, Arthur B., Lakeland, Fla.
(Member North Central Counties)
Cramer, Quentin, Kansas City
Crawford, Archie L., Joplin
Crawford, Katherine J., University City
Crawford, Oral B., Springfield
Crawford, Robert M., Sullivan
Creditor, Morton C., Kansas City
Creech, Joseph C., Troy
Crego, Clarence H., Jr., St. Louis
Cremer, William J., Fulton
Cresswell, George F., Potosi
Crews, Robert N., Fulton
Crider, Russell J., St. Charles
Criscione, James R., St. Louis
Crispell, Lawrence S., Joplin
Critchlow, William C., Sikeston
Crites, Edward, Sedgewickville
Crocker, Albert M., Kansas City
Croom, Dorwyn W., Malden
Crosby, Alice S., Salem
Crossman, Robert W., Webster Groves
Crouch, F. Richard, Farmington
Crowe, John T., Cape Girardeau
Crowell, Hugh C., St. Louis
Crozier, Franklin A., Richmond
Culbertson, William F. Kansas City
Cullers, Charles H., Trenton
Cullum, Albert G. J., Cumberland, Ky.
(Member St. Louis Medical Society)
Cummings, James H., St. Louis
Cunningham, Darral D., Springfield
Curl, Howard, Joplin
Curran, Edward J., Kansas City
Curran, George L., St. Louis
Curran, Kevin E., Kansas City
Curran, Maurice D., Kansas City
Curts, Calvin J., Kansas City
Cutcliff, Daniel J., Kansas City
Cutler, Harold M., St. Louis
Cutler, Harry, St. Louis
Cutter, Edgar B., Address Unknown
(Member St. Louis Medical Society)
Czebrinski, Edward W., St. Louis

D

Daake, John W., St. Louis
Dahms, Gustave, St. Louis
Daley, Frank R., Hamilton
Dalton, Arthur R., St. Louis
Daman, George A., St. Louis
Dames, Richard J., St. Louis
Damron, Edward O., Elsberry
Damron, Oscar H., Warrensburg
Danis, Peter G., St. Louis
Dankner, Arnold, St. Louis
Dann, Davis S., Kansas City
Darnell, Thomas F. B., Columbia
Daughaday, William H., St. Louis
Daugharty, Duane A., Address Unknown
(Member St. Louis Medical Society)
Daum, Harold F., Sedalia
Davault, George K., Richmond
Davidson, John D., St. Louis
Davidson, Morris, Clayton
Davie, Joseph, St. Louis
Davis, C. Braxton, Nevada
Davis, Edgar W., St. Louis
Davis, Frank L., St. Louis
Davis, Harry H., Rolla
Davis, Herbert V., Kansas City
Davis, Irl R., St. Louis
Davis, Jack M., Raytown
Davis, John J., Overland Park, Kansas
(Member Jackson County)
Davis, Kenneth A., Kansas City
Davis, Landis Y., Canton
Davis, Leonard L., Jr., Mexico
Davis, Martin W., Webster Groves
Davis, Myron W., St. Louis
Davis, Paul C., Neosho
Davis, Robert C., Kansas City
Davis, Wilbur L., Charleston
Day, Anthony B., Marshall
Day, Cameron B., Kansas City
Day, Maxwell, St. Joseph
Deakin, Rogers, St. Louis
Dean, Francis D., Fayette
Dean, Lee W., Jr., Clayton
Decker, Albert I., Kansas City
DeGenova, Gerald H., Ste. Genevieve
DeHovitz, Bernard, St. Louis
Dietchman, Robert B., St. Louis
de la Torre, John J., Sullivan
Delzell, William A., Springfield
DeMaria, Peter F., Kansas City
Demko, Frank, St. Louis
Demko, William, St. Louis
DeMott, John D., Kansas City
DeMotte, John A., Kansas City
Dempsey, David T., Kennett
Denk, Alan F., Indianapolis, Ind.
(Member St. Louis Medical Society)
Denney, Richard W., Mountain Grove
Dennie, Charles C., Kansas City
Denninghoff, James C., Columbia
Dennis, W. Paul, Flat River
Denny, Hubert M., Union
Denton, Levi D., Hayti
DePew, Heber B., St. Louis
Dernoncourt, John E., Charleston
DeTar, Burleigh E., Joplin
DeTar, B. E., Jr., Joplin
DeTar, George F., Joplin
Deutch, Max, St. Louis
Devine, John B., St. Louis
Devine, Joyce E., Boston, Mass.
(Member St. Louis Medical Society)
Deweese, Everett R., Kansas City
Deyton, John W., St. Louis
Dickler, Donald J., St. Louis
Dickson, Frank D., Kansas City
Dieckman, William C., Dexter
Diehr, Alvin H., St. Louis
Diehr, Maurice A., St. Louis
Diekroeger, Manuel L., Boonville
Dietrich, Karl D., Columbia
Dietz, M. Wendell, Springfield
DiLeo, Senatro W., St. Louis
Dilday, Thomas F., Jr., Joplin
Dill, Foster A., Maplewood
Dillard, Erin M., Springfield
Dills, Joseph N., Springfield
Dimond, Edgar A., McKinney, Texas
(Member Greene County)
Dinelli, Frank E., Poplar Bluff
Diveley, Rexford L., Kansas City
Dixon, John R., Brookfield
Dixon, Otto J., Kansas City
Dixon, Vewiser L., Kansas City
Dlabal, Luke J., Independence
Dmytryk, Eugene T., St. Louis
Doan, Deborah, Bakersfield
Doane, William L., Grandview
Dodd, Robert B., St. Louis
Dodge, Mark, Kansas City
Dodge, Milton, Kansas City
Doggett, Sylvester, Sikeston
Doherty, William R., Kansas City
Doisy, Robert A., Glendale
Dolezal, Joseph B., Kansas City
Donahoe, James L., St. Louis
Donaldson, Robert C., St. Louis
Donley, Leo F., Jr., St. Louis
Donley, Robert R., Monett
Donnell, Harold E., DeSoto
Donnell, Robert H., Crystal City
Donnell, Thomas A., DeSoto
Dooley, Thomas A., St. Louis
Dorris, Richard P., Jefferson City
Dorsch, Ervin H., Independence
Dorsett, E. Lee, Clayton
Doty, Roy J., Rolla
Doubek, John C., St. Louis
Doubek, John C., Jr., St. Louis
Douglas, John W., Joplin
Douglass, Jesse E., Kansas City
Dowd, James F., Jr., St. Louis
Dowell, Donald M., Chillicothe
Dowell, Horace S., Chillicothe
Downey, James W., Kansas City
Doyle, Charles R., St. Louis
Drace, Charles C., St. Louis
Drace, Charles C., Jr., St. Louis
Drace, James J., Cape Girardeau
Drake, Avery A., Rolla
Drake, Roy F., Kansas City
Drake, Truman G., St. Louis
Drake, William L., Jr., St. Louis
Draney, Thomas E., Kansas City
Drennan, James A., St. Louis
Drescher, Emmett B., St. Louis
Drews, Leslie C., St. Louis
Drey, Norman W., St. Louis
Dreyer, Carl J., Webster Groves
Dreyer, Philip V., Huntsville

Dripps, Roy C., St. Louis
Drisko, Robert M., Kansas City
Drowns, Bruce V., Kansas City
Drum, Clarence G., St. Louis
Drum, Helen M., Clayton
Duane, George W., St. Louis
Dubuque, Theodore J., Jr., St. Louis
Duckworth, John K., Hayti
Duden, Charles W., St. Louis
Duemler, John H., St. Louis
Duer, Mildred C., Kansas City
Duffy, Oliver F., Trenton
Duggan, John J., Jr., Kirkwood
Dulick, Michael, Brentwood
DuMont, Clement C., St. Joseph
DuMontier, R. J., O'Fallon
Dunaway, Howard A., Sikeston
Duncan, Ralph E., Kansas City
Duncan, Robert D., Springfield
Duncan, William H., Kansas City
Dunham, Robert H., N. Kansas City
Dunham, Richard B., St. Louis
Dunleavy, James D., Kansas City
Dunmire, George Q., Kennett
Dunn, Robert E., St. Louis
Dunshee, Robert E., Maryville
Durnell, Monaford D., Lee's Summit
Durst, Henry, Fulton
Duval, Addison M., Jefferson City
Dworkin, Saul, St. Louis
Dwyer, Frank X., Kansas City
Dwyer, Hugh L., Kansas City
Dwyer, Reinhardt D., N. Kansas City
Dwyer, Thomas L., Mexico
Dyer, Dallas J., St. Louis
Dyer, David P., Sedalia

E

Eades, Dee W., St. Louis
Eagleton, Mark D., Clayton
Earp, Ralph K., St. Louis
Ebel, Eugene H., St. Louis
Eber, Carl T., St. Louis
Eberle, John P., St. Louis
Eberle, Vincent L., St. Louis
Echterhoff, Harry R., St. Louis
Eck, Birkle, St. Louis
Ecker, Decider, Pacific
Eckert, Clarence T., St. Louis
Ecklund, Archibald M., Great Lakes, Ill.
(Member St. Louis Medical Society)
Ector, Henry J., Mexico
Edde, Clifford G., Kansas City
Edele, Eugene H., St. Louis
Edmonds, Devilla A. D., Kansas City
Edmondson, Charles T., Springdale, Ark.
(Member Dunklin County)
Edwards, D. R., Sedalia
Edwards, Francis L., Monett
Edwards, Joseph C., St. Louis
Edwards, Theodore F., N. Kansas City
Edwards, Waldo B., Kirkwood
Efron, Joseph, Olivette
Eggleston, Donald E., Macon
Egley, Loren E., St. Louis
Eidelman, Jack R., St. Louis
Eidmann, Walter P., St. Louis
Eigel, Edwin G., St. Louis
Eimer, Charles E., St. Louis
Eisemann, Gustave, Kansas City
Eisenmann, Benjamin P., New Haven
Eisenstein, Albert B., St. Louis
Eklund, Alfred W., Pleasant Hill
Elders, Frank A., Jr., Cuba
Eldridge, Charles J., Kansas City
Elias, David J., Independence
Eliscu, Juliette, Joplin
Elkins, Ronald F., Springfield
Eller, C. Howe, Clayton
Ellersieck, Dorothy M., St. Louis
Ellery, William L., LaGrange
Ellett, William H., Appleton City
Elliott, James R., Pasadena, Calif.
(Member Jackson County)
Elliott, Raymond G., Kansas City
Elliott, Wade E., Kansas City
Ellis, Burnett E., Gideon
Ellis, Calvin C., St. Louis
Ellis, Dick J., St. Louis
Ellis, Elmer F., Kansas City
Ellis, Francis J., Springfield
Ellis, Sam T., Richmond, Va.
(Member Marion-Ralls-Shelby Counties)
Ellison, Leroy E., Maplewood
Ellisworth, Willard, Cainsville
Elrod, Dennis B., Cape Girardeau
Elser, Otto H., Independence
Elson, Julius, Ladue
Emerson, Reynolds L., Brentwood
Emmert, Fred, St. Louis
Engel, Lawrence P., Kansas City
Engelhardt, Robert C., Poplar Bluff
Engleman, Reinhold, St. Louis
English, Milton T., Jr., Kirksville
English, Wallace D., Cardwell
Engman, Martin F., Jr., St. Louis
Enloe, Lawrence D., Jefferson City
Enna, Carl D., Kansas City
Epp, George J., St. Louis
Epple, Kathryn C., Mexico
Epple, Lawrence K., Mexico
Erlanger, Joseph, St. Louis
Ernst, Edwin C., St. Louis
Ernst, Edwin C., Jr., St. Louis
Ernst, Joseph G., Oakland
Ernst, Richard E., St. Louis
Ernst, Roland P., St. Louis
Eshelman, Albert D., Independence
Eskeles, Irwin H., St. Louis
Esker, George, Nevada
Esslinger, Arthur T., St. Louis
Estes, Albert M., Cape Girardeau
Estes, Jack M., Ferguson
Eto, Jackson, St. Louis
Eubank, David F., Raytown
Eubank, Dillard M., Raytown
Eubank, William R., Kansas City
Eubank, William Y., Raytown
Evans, Alden M., Columbia
Evans, Ezra L., Jr., Springfield
Evans, Harry T., Branson
Eversoll, Norton, J., St. Louis
Ewert, John O., Sedalia
Exon, C. Stuart, Jefferson City
Eyermann, Charles H., St. Louis
Eyermann, H. Walter, Warrenton

F

Fair, William L., Chillicothe
Fairchild, James F., Perryville
Fairshter, Alex E., St. Louis
Falk, O. P. J., St. Louis
Fallet, Charles E., DeSoto
Farley, Claude C., Kansas City
Farley, William M., St. Louis
Farney, Jacob P., Kansas City
Farnsworth, Jesse J., Kansas City
Farrar, Charles B., Cape Girardeau
Farrar, John T., Greenwich, Conn.
(Member St. Louis Medical Society)
Farrell, Robert J., St. Louis
Farris, William W., St. Louis
Farthing, Fred R., Springfield
Farthing, Gene W., Springfield
Feierabend, Frank L., Kansas City
Feind, Earl E., Rolla
Feinstein, Leon A., St. Louis
Feist, George V., Kansas City
Feldaker, Robert M., St. Louis
Feldman, David, Clayton
Feller, Charles E., Springfield
Feller, Harold H., St. Louis
Fellows, William W., Miami, Fla.
(Member Chariton-Macon-Monroe-Randolph Counties)
Fellhauer, Carl M., St. Louis
Feltz, Lawrence W., Perryville
Ferguson, Donald S., Kansas City
Ferguson, James T., Kansas City
Ferguson, John P., Jr., Springfield
Ferguson, L. H., Jr., Joplin
Ferguson, Luther J., St. Joseph
Ferguson, Ralph, Joplin
Ferguson, Robert M., Webb City
Ferguson, Thomas B., St. Louis
Ferguson, Wilson J., Sikeston
Ferrara, John P., St. Louis
Ferrell, Thomas E., Jr., Springfield
Ferris, Carl R., Kansas City
Fessenden, Ersel M., Springfield
Finger, Donald H., St. Louis
Fingerhood, Marvin G., St. Louis
Fingert, Hyman H., St. Louis
Finkel, Barney W., St. Louis
Finkle, Robert H., Raytown
Finley, Freeman L., St. Louis
Finn, Murray E., St. Louis
Finnegan, Joseph V., St. Louis
Finney, William O., Chaffee
Fischer, Edward H., N. Kansas City
Fischer, Erich, St. Louis
Fischer, Theodore, Altenburg
Fischer, Thomas J., St. Louis
Fish, Virgil O., St. Louis
Fisher, George E., Lebanon
Fisher, Joseph L., St. Joseph
Fisher, Stanley D., Sedalia
Fitch, C. H. Max, Springfield
FitzGerald, Leo P., University City
Fitzgerald, Robert H., Independence
Fitzgerald, William T., St. Louis
Fitzgibbons, John F., St. Louis
Flance, Israel J., St. Louis
Flanders, Horace F., Kansas City
Flatley, John A., Raytown
Flavan, David B., St. Louis
Fleishman, Alfred, St. Louis
Fleming, Jacob W., Jr., Moberly
Fleming, Paul D., Clayton
Fleming, Robert J., St. Charles
Fleming, Royall B., Kansas City
Fleming, Thomas S., Moberly
Fletcher, Paul F., St. Louis
Fletes, James W., St. Louis
Florian, Albert J., Kansas City
Flotte, Bernard H., St. Louis
Flotte, Sylvester A., St. Louis
Flynn, Edward P., St. Louis
Flynn, John T., St. Louis
Flynn, Joseph E., Columbia
Flynn, Joseph E., St. Louis
Flynn, Thomas T., St. Louis
Focht, Ralph H., Strafford
Folck, William P., Kansas City
Fong, Richard R., Oakland, Calif.
(Member Lincoln-St. Charles Counties)
Ford, Lee T., Jr., St. Louis
Ford, Walter W., Gordonville
Forgrave, John R., St. Joseph
Forgrave, Leon P., St. Joseph
Forman, George W., St. Joseph
Forman, Louis H., Kansas City
Forsen, James A., St. Louis
Forsman, Waldo W., Jr., Sappington
Forster, Armand C., St. Louis
Forsyth, B. Todd, St. Louis
Forsythe, Robert W., Kansas City
Forti, John J., St. Louis
Foster, Howard M., St. Louis
Foster, Jack L., Desloge
Foster, Leon, St. Louis
Foster, Robert L., St. Louis
Fowler, Fred D., Kansas City
Fowler, I. Charles, N. Kansas City
Fowler, James W., Kansas City
Fowler, Marvin L., West Plains
Fox, Leon J., St. Louis
Fox, Robert E., St. Louis
Frame, Homer G., Springfield
Francis, William C., Springfield
Francka, W. F., Hannibal
Franklin, Harold A., St. Louis
Franklin, Max S., St. Louis
Fraser, Sydney A., St. Louis
Frazier, Robert L., Charleston
Fredeen, Robert C., Kansas City
Frederick, Raymond O., St. Louis
Freedman, Harold, St. Louis
Freedman, Ruth S., St. Louis
Freeman, David M., St. Louis
Freeman, Hal E., Springfield
Freeman, Robert F., Columbia
Freeman, Spencer L., Kirksville
Freiermuth, Leo J., Jr., Portland, Ore.
(Member St. Louis Medical Society)
Freiheit, Harold J., Ladue
Freimuth, Louis E., St. Louis
Frerking, Herbert W., St. Louis
Freund, H. G., Fulton
Freund, Samuel J., St. Louis
Friedman, Bernard, St. Louis
Friedman, Morris L., Kansas City
Frick, John P., Kansas City
Friedrichs, Vernon D., Pilot Grove
Fries, Armand D., St. Louis
Fries, John W., St. Louis
Fries, William A., St. Louis
Frisch, Jane, St. Louis
Friskel, Arthur K., St. Louis
Fritsch, Andrew J., St. Louis
Fritzlen, Thomas J., Kansas City, Kansas
(Member Jackson County)
Froelich, Edwin J., St. Louis
Froelich, Rae W., Lebanon
Froelich, Robert E., Augusta, Ga.
(Member St. Louis Medical Society)
Fryer, Minot P., St. Louis
Fuchs, George J., Creve Coeur
Fuchs, George J., Jr., Columbia
Fuhrman, Donald L., Kansas City
Fulkerson, Wilbur E., Higginsville
Fulks, Richard B., California
Fulton, Albert E., Kansas City
Funsch, Edwin C., St. Louis
Funsch, Robert E., St. Louis
Furla, Gus J., St. Louis
Furlow, Leonard T., St. Louis
Fuson, Levi H., St. Joseph
Fuson, William A., Trenton
Fuzzell, Jameso, Kennett

G

Gaary, Alvin E., St. Louis
Gaebe, Harold C., Desloge
Gaffney, Caldwell J., St. Louis
Gafney, George T., St. Louis
Gaines, Quentin M., Kirkwood
Gainey, Harold L.. Kansas City
Gale, Joseph F., Chillicothe
Gale, Philip R., St. Louis
Galeota, William R., Columbia
Gall, Ira, St. Louis
Gallagher, John F., St. Louis
Gallagher, Lionel M., California
Gallagher, Neil I., St. Louis
Gandlmayr, Jack M., St. Louis
Ganley, William C., Kansas City
Gansloser, Maximilian W., St. Louis
Gansloser, Wilbert M., Clayton
Gantner, George E., Jr., St. Louis
Gantt, Ernest S., Jr., Mexico
Gantz, John A., St. Louis
Garcia, Charles L., Mexico
Gard, Raymond F., Independence
Gardner, Joseph W., Glasgow
Garfinkel, Bernard T., St. Louis
Garner, Lynn M., Jefferson City
Garrett, Glen H., Columbia
Garrison, Roy F., Kansas City
Garrison, T. W., Camdenton
Gary, George, Marceline
Gaston, Ralph E., St. Louis
Gaskins, John H., Kansas City
Gauer, Robert J., Kansas City
Gaunt, Frank P., Webster Groves
Gaunt, William D., Columbia
Gay, Elizabeth K., St. Louis
Gay, Elmer E., Richmond
Gay, George, Ironton
Gearhart, Merriam, Bethany
Gearhart, Wilbur H., Overland
Gedney, William B., Valley Park
Geha, Braham J., Kansas City
Geise, August W., Jr., Albuquerque, N. M.
(Member St. Louis Medical Society)
Gelperin, Abraham, Kansas City
Gempel, Paul A., Kansas City
Gentry, Enoch N., Jr., Kansas City
Gentry, Marvin C., Ava
Gentry, Merritt L., Springfield
Geraughty, Edward, Liberty
German, Walter A., Jr., Springfield
Gernstetter, Sangwill L., Poplar Bluff
Gerst, Aloysius C., St. Louis
Gestring, Hugh A., Kansas City
Getelson, Joseph, Kansas City
Gibbons, Edward H., St. Louis
Gibson, Davis M., Kansas City
Gibson, Helen F., St. Louis
Gibstine, Marvin H., St. Ann
Gieselman, Ralph V., St. Louis
Giesler, Donald H., Osceola
Gildea, Edwin F., St. Louis
Gildea, Margaret C. L., St. Louis
Gilden, Jerome J., St. Louis
Gilkey, Harry M., Kansas City
Gillespie, Roy, Branson
Gillespie, William J., St. Louis
Gilliland, Oliver S., Kansas City
Gillmor, Charles S., Kansas City
Gilpin, Doris C., Springfield
Ginsberg, Norman A., Kansas City
Gish, Rutledge, Fulton
Gissy, Charles J., St. Louis
Gist, William W., Kansas City
Gitt, Joseph J., St. Louis
Gladney, John H., St. Louis
Glascock, Donald W., Palmyra
Glaser, Martin J., St. Louis
Glass, William J., Jr., Monett
Glassberg, Bertrand Y., St. Louis
Glasscock, Ernest L., Kansas City
Glenn, Elmer E., Springfield
Glennon, William P., St. Louis
Glick, Harry N., St. Louis
Glover, Kenneth, Mount Vernon
Glynn, Robert R., Springfield
Gnade, Albert J., St. Louis
Goebel, Joan M., St. Louis
Goettman, William I., St. Louis
Goldberg, Isadore E., Braymer
Goldenberg, Sidney, St. Louis
Goldenson, Max J., St. Louis
Goldfarb, Alvin, Olivette
Goldman, Alfred, St. Louis
Goldman, Hyman J., St. Louis
Goldman, Melvin L., St. Louis
Goldman, Stanley L., Kansas City
Goldring, Sidney, St. Louis
Goldsich, Edward, Kansas City
Gollub, Samuel W., St. Louis
Gomez, Cesar A., Jr., St. Louis
Gonser, Karl B., Sedalia
Gonzalez, Mario G., Warrensburg
Goodman, J. N., Glendale
Goodman, LeRoy, Kansas City
Goodman, Nathaniel, St. Louis
Goodrich, Harold A., Webster Groves
Goodson, William H., Liberty
Goodson, William H., Jr., Kansas City
Gordon, James S., Columbia
Gorelick, David F., Springfield
Gorham, Arwin E., St. Louis
Gorla, Wayne O., St. Louis
Gorrell, Ned B.. Grandview
Gose, Don F., Springfield
Gotham, James E., Kansas City
Gottsch, Joseph C., Independence
Gowen, Leo F., St. Louis
Grabau, Gene H., St. Louis
Grable, James D., Portageville
Grabske, Charles F., Independence
Grabske, Charles F., Jr., Independence
Grace, Charles M., Cape May, N. J.
(Member Grand River Medical Society)
Graeser, Richard G., Kirkwood
Graham, James W., Kansas City
Graham, Wallace H., Kansas City
Graneto, Joseph A., St. Louis
Grant, Claude S., St. Joseph
Grant, John M., St. Louis
Grant, Samuel B., St. Louis
Grantham, Samuel A., Jr., Joplin
Grauerholtz, James W., Kansas City
Graul, Elmer G., St. Louis
Graul, Walter P., St. Louis
Graves, Arthur J., Mount Vernon
Graves, F. Burton, Joplin
Gray, Walter C., St. Louis
Grayson, Richard R., Columbia
Grayson, Ted L., St. Louis
Greaves, Eli A., Kansas City
Grebel, Clement B., St. Louis
Greditzer, Arthur S., St. Louis
Green, D. M., St. Louis
Green, John R., Independence
Green, John R., Independence
Green, Manuel E., St. Louis
Green, Robert S., Kennett
Green, Stanley L., Independence
Greenberg, Charles, St. Joseph
Greene, Harry L., Hannibal
Greene, W. Wallace, Kansas City
Greenman, Marshall B., Clayton
Gregory, Ralph W., Kansas City
Griffin, Mary E. P., Buffalo
Griffin, Olin A., Jr., Buffalo
Griffith, John A., Jr., Kansas City
Griggs, James Y., St. Louis
Grim, Edward M., Kirksville
Grimes, Manning E., St. Joseph
Grindon, Joseph B., Jr., St. Louis
Griot, Albert J., St. Louis
Groce, George, Fulton
Grogan, Frank M., St. Louis
Gronau, Axel R., St. Louis
Grosskreutz, Joseph A., St. James
Grossman, Marvin, Fredericktown
Grove, G. W., Knobnoster
Growdon, John A., Kansas City
Grueb, Paul M., St. Louis
Gruenfeld, Gerhard E., St. Louis
Grundmann, William H., St. Louis
Grybinas, Vytautas J., E. St. Louis, Ill.
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Gubin, Alan S., Caruthersville
Guccione, Joseph B., St. Louis
Guffey, Don Carlos, Kansas City
Guhleman, Henry V., Jr., Jefferson City
Guldner, Edmond, Lamar
Gulick, Charles R., St. Louis
Gullett, Charles C., Kansas City
Gum, William R., St. Louis
Gummels, Belmont B., St. Louis
Gundlach, Arthur, St. Louis
Gundle, Sigmund, Kansas City
Gunn, Jack, Versailles
Gunn, Richard M., Kansas City
Gunn, Walter T., St. Louis
Gurnee, Landon H., Jefferson City
Guze, Samuel B., Los Angeles, Calif.
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Gzell, Ronald, St. Louis

H

Hackmeyer, Rubin, St. Louis
Haddock, James N., Webster Groves
Haffner, Heinz, St. Louis
Hagan, Daniel J., St. Louis
Hagebusch, Omer E., St. Louis
Hagemann, Paul O., St. Louis
Haggen, Margaret E., Kansas City
Hahn, Andrew L., Springfield
Haight, John M., Kansas City
Haith, Walter F., Kansas City
Hale, Tyre H., St. Louis
Haley, Jack A., Kansas City
Hall, Andy, Jr., St. Louis
Hall, David G., Columbia
Hall, David W., Springfield
Hall, Durward G., Springfield
Hall, Eugene W., Ferguson
Hall, Frank W., Cape Girardeau
Hall, Lee A., St. Louis
Hall, Marvin F., Joplin
Hall, Preston C., St. Louis
Hall, Robert A., St. Louis
Hall, Robert G., St. Louis
Hall, Thomas B., Kansas City
Halperin, Phillip H., Kansas City
Halpern, Lawrence K., St. Louis
Hamel, Herbert A., Kansas City
Hamill, Robert W., Kansas City
Hamilton, Caldwell K., St. Louis
Hamilton, Eugene G., Clayton
Hamilton, Eugene H., Joplin
Hamlin, Wyeth, Hannibal
Hammler, Christiana V., St. James
Hammond, John J., St. Louis
Hampton, Henry E., St. Louis
Hampton, Oscar P., Jr., St. Louis
Hampton, Stanley F., St. Louis
Hamtil, Edward W., St. Louis
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Handler, Fred P., Jefferson City
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Hanford, Wesley W., St. Louis
Hankin, Norman M., St. Louis
Hanlon, C. Rollins, St. Louis
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Hans, Willard J., St. Louis
Hansbrough, Eugene T., Poplar Bluff
Hansel, French K., St. Louis
Hansen, Arthur L., Butler
Hanser, S. Albert, St. Louis
Hanser, Theodore H., St. Louis
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Hardy, Joseph A., Jr., St. Louis
Harell, Alex, St. Louis
Harford, Carl G., St. Louis
Harkin, James C., St. Louis
Harkins, William B., St. Louis
Harkness, Harry, Warrensburg
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Harms, Florian L., Salisbury
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Harris, Hinman A., University City
Harris, Solon P., St. Louis
Harrison, Lee B., St. Louis
Harrison, Stanley L., St. Louis
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Hart, Pearl V., Coatsville
Harting, Hugh R., St. Louis
Hartman, Paul T., St. Louis
Hartmann, Alexis F., St. Louis
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Hartstein, Jack, University City
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Hartwig, Frederick H., Kansas City
Hartwig, John A., St. Louis
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Harwell, J. Lester, Poplar Bluff
Hash, Emalyn H., Kansas City
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Hasson, Jack, St. Louis
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Haw, Marvin T., Jr., Bonne Terre
Hawk, Bray O., St. Louis
Hawker, William D., St. Louis
Hawkins, George L., Jr., St. Louis

Hawkins, George W., Salisbury
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Hayden, Loyola F., St. Louis
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Haynes, Lee, Kansas City
Haynes, Pugh, Jr., St. Louis
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Haynes, Solon E., Kansas City
Hazen, Robert M., Kansas City
H'Doubler, Francis T., Springfield
H'Doubler, Francis T., Jr., Springfield
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Heeb, Max A., Sikeston
Heid, Lloyd L., St. Louis
Heideman, Alvah G., St. Louis
Heideman, Milo L., St. Louis
Heifetz, Carl J., St. Louis
Heinbecker, Peter, St. Louis
Helbring, Edward J., St. Louis
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Hellerstein, Stanley, Kansas City
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Helm, James O., New Florence
Helman, Richard G., Kansas City
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Hendin, Aaron, Olivette
Hendren, Glenn W., Liberty
Hengen, Henry E., Bridgeton
Henke, Charles F., St. Louis
Hennelly, John J., St. Louis
Henrickson, Hardin M., Poplar Bluff
Henrickson, Hardin O., Poplar Bluff
Henry, Clarke L., Kansas City
Henry, Schubert D., Kansas City
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Hepner, Walter R., Jr., Baltimore, Md.
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Herman, Morris, St. Louis
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Hetlage, Louis P., Troy
Heusler, Anton F., St. Louis
Hewitt, Walter R., St. Louis
Heyer, Oscar C., St. Louis
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Hickey, Robert F., St. Louis
Higgins, Robert S., Kansas City
Hildreth, H. Rommel, St. Louis
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Hill, Jesse N., Independence
Hilton, Paul E., Kirksville
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Hines, Paul, Kansas City
Hink, Frederick W., Kansas City
Hirsch, Albert, Vandalia
Hirsch, Joe E., Kansas City
Hite, Henry A., Green Ridge
Hobart, Carl A., St. Louis
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Hobbs, Earl B., Smithville
Hobbs, George H., Mount Vernon
Hobbs, John E., St. Louis
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Hodge, Robert H., N. Kansas City
Hodges, Fred J., St. Louis
Hodgson, Frank H., Kansas City
Hoefer, Walter H. V., St. Louis
Hoelscher, Harold F., Warrenton
Hoeper, Samuel D., Kansas City
Hoffman, Jacob S., Kansas City
Hoffmann, Augustin D., St. Louis
Hoffmann, R. Lee, Kansas City
Hoffmann, Ronald E., St. Louis
Hofsommer, Armin C., Webster Groves
Hofstatter, Leopold, St. Louis
Hofstatter, Lilli, St. Louis
Hogan, Daniel F., Port Isabel, Texas
(Member Jackson County)
Hogan, Patrick C., St. Louis
Hogancamp, Charles E., St. Louis
Hogeboom, George W., Springfield
Hogg, Garrett S., Jr., Cabool
Hogue, Frank S., Kansas City
Holbrook, Charles K., St. Louis
Holcomb, Cecil E., Blytheville, Ark.
Holdenried, William E., St. Louis
Holder, Thomas M., Kansas City
Holley, Donald B., Camdenton
Holliday, Morgan L., Fillmore
Hollingsworth, Ray S., Clinton
Hollo, Vencel W., St. Louis
Hollweg, Kenneth C., Kansas City
Holman, Jurney H., Unionville
Holman, Melvin V., Kansas City
Holmes, David R., St. Louis
Holmes, John L., Columbia
Holscher, Edward C., St. Louis
Holt, Earl P., Jr., St. Louis
Holt, Waldo S., Mission, Kans.
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Holton, Edward B., Independence
Holtz, Alan S., Kirkwood
Holtzman, Samuel, Joplin
Homan, Joseph S., St. John
Honich, Nicholas J., St. Louis
Hook, Waller G., Kansas City
Hooker, John H., St. Louis
Hooper, Robert N., Kansas City
Hoover, H. Lee, Jr., Springfield
Hope, James L., Lebanon
Hopkins, Florian G., Gideon
Hopkins, Thomas J., Sedalia
Hopkins, Thomas S., Sedalia
Hornback, Edward R., Joplin
Horner, John L., St. Louis
Horst, Otto C., Springfield
Horton, James D., Springfield
Horwitz, Irwin B., St. Louis
Hosto, Leland E., St. Louis
Houck, Russell M., Kecoughtan, Va.
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Howden, Thomas L., St. Joseph
Howe, Louis F., St. Louis
Howell, B. D., Brookfield
Hrdlicka, Victor E., St. Louis
Hoxworth, Gerald M., Cape Girardeau
Huber, Erwin T., St. Louis
Huber, Lasley E., Moberly
Huck, Frank F., Fenton
Huck, Richard F., St. Louis
Huckstep, Robert A., Farmington
Huggins, Albert M., St. Louis
Hughes, Gerald E., Kansas City
Hughes, Judson M., St. Joseph
Hughes, Robert G., Creve Coeur
Hughes, Shelby B., Clinton
Hulbert, Bernard, St. Louis
Humberd, Charles D., Barnard
Hummel, Anton J., St. Louis
Humphrey, Harvey A., St. Louis
Humphreys, Edward T., Boonville
Hungate, Carroll P., Kansas City
Hunleth, Frank E., St. Louis
Hunt, Claude J., Kansas City
Hunt, John W., Jr., Leadwood
Hunt, Lloyd H., Salem
Hunt, William J., St. Joseph
Hunter, James R., Webster Groves
Hunter, Martin P., Kansas City
Hurst, Ben B., Lebanon
Hurst, Wilfred W., Joplin
Hurwitt, Frank, Kansas City
Husted, George W., Parma
Hutchinson, James H., Jr., St. Louis
Hutto, A. Herman, St. Louis
Hutton, Joseph L., St. Louis
Hyman, Anna, St. Louis
Hyndman, Charles E., St. Louis

I

Ide, Lucien W., St. Joseph
Imes, Clifford H., Lynwood, Calif.
(Member Ozarks County)
Imes, Elvin D., Maryville
Ingham, Walton C., Kansas City
Inkley, John J., St. Louis
Irick, Carl C., Webster Groves
Irland, Robert D., Kansas City
Irwig, Fred, Kansas City
Irwin, William F., Leasburg
Isbell, Charles H., Carthage
Isom, Waldo B., Knox City
Israel, Milton R., St. Louis
Ittner, George W., Jr., St. Louis
Ivy, Henry B., Springfield
Izmirlian, Grant, St. Louis

J

Jackson, Robert L., Columbia
Jackson, Vernon B., Fulton
Jackson, William R., Kansas City
Jackson, William R., Maryville
Jacob, Walter P., Kansas City
Jacobs, Charles C., St. Louis
Jacobs, Frederick A., St. Louis
Jacobs, Morton, Kansas City
Jacobs, Walter H., Kansas City
Jaeger, Joseph N., Jackson
Jaime, Nicholas, Kansas City
James, Norman A., St. Louis
James, Otis E., Jr., Kansas City
James, William M., St. Louis
Jameson, James E., Springfield
Jamison, Robert M., Columbia
Janney, James G., Jr., Clayton
Jansen, Robert, Kansas City
Jarvis, James A., Kansas City
Jaudon, Joseph C., Clayton
Javaux, Everett J., St. Louis
Jean, J. Ted, St. Louis
Jeans, Virgil, Joplin
Jeffries, Robert C., Kansas City
Jenkins, Joseph M., St. Charles
Jenkins, Paul A., Lebanon
Jennett, Harry N., Kansas City
Jennett, James H., Kansas City
Jennings, Ethlyn C., N. Kansas City
Jensen, J. Ernest, St. Louis
Jick, Sidney, St. Louis
Johns, George A., Pikesville, Md.
(Member Saline County)
Johnson, C. Laurence, Kansas City
Johnson, Charles R., San Diego, Calif.
(Member Marion-Ralls-Shelby Counties)
Johnson, Charles S., Warrensburg
Johnson, David S., St. Louis
Johnson, Earl W., Cape Girardeau
Johnson, Edgar W., Prairie Village, Kans.
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Johnson, Edward M., Ft. Campbell, Ky.
(Member Chariton-Macon-Monroe-Randolph Counties)
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Johnson, Frank C., Doniphan
Johnson, George L., San Francisco, Calif.
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Johnson, Grover C., Marthasville
Johnson, James S., Kansas City
Johnson, Mitchell D., Ferguson
Johnson, Q. Ray, Jr., New Orleans, La.
(Member Pike County)
Johnson, Richard E., Columbia
Johnson, Roy, Ferguson
Johnson, Thomas M., Kansas City
Johnson, Warford B., Springfield
Johnson, William A., Kansas City
Johnson, William F., Springfield
Johnston, Joseph L., Springfield
Johnstone, John, Jr., Kirkwood
Johnstone, Paul N., Kansas City
Jolly, Benjamin N., Mexico
Jolly, William H., Mexico
Jonas, Harry S., Jr., Independence
Jones, Andrew B., St. Louis
Jones, Augustin, St. Louis
Jones, Dorothy J., Clayton
Jones, Edward E., Lilbourn
Jones, Edward S., Harrisonville
Jones, George H., Kansas City
Jones, Grey, St. Louis
Jones, James B., Brentwood
Jones, John B., Kirksville
Jones, Keith D., Warrensburg
Jones, Otey S., St. Louis
Jones, Ralph H., Rochester, Minn.
(Member Saline County)
Jones, Richard A., St. Louis
Jones, Theodore R., Kansas City
Jones, Victor, Brentwood
Jones, Vincent L., St. Louis
Jordan, Edward J., St. Louis
Jordan, Walter R., St. Louis
Jorstad, Louis H., St. Louis
Joseph, Harold J., Ladue
Joseph, Samuel R., Columbia
Joslyn, Harold L., St. Louis
Jost, Charles A., St. Louis
Jotte, Richard F., St. Ann
Juden, Alexander G., Cape Girardeau
Judy, Joseph D., Ferguson
Justus, John B., Kansas City

K

Kahn, Lawrence, St. Louis
Kallenbach, Glen P., Mexico
Kamakas, Nicholas, Ferguson
Kanagowa, Hajime H., Jefferson City
Kane, Clyde E., St. Louis
Kantor, Julius M., Kansas City
Kantor, Samuel, Kansas City
Kaplan, Albert, Normandy
Kappesser, Netajean B., St. Louis
Kappesser, Roland C., St. Louis
Karandjeff, Apostle D., St. Louis
Kardesch, Milton, St. Louis
Karl, Michael M., St. Louis
Karraker, Alvan G., Farmington

Karsh, Robert S., University City
Kartus, Irving, Kansas City
Kaskie, Clifford R., Clayton
Kasten, Melvin C., Cape Girardeau
Katz, Milton, Kansas City
Kauffman, Ruth, Versailles
Kaul, Philip G., Kansas City
Kealhofer, George C., Kansas City
Keats, Theodore E., Columbia
Keeble, Charles B., St. Louis
Keeler, James E., Kansas City
Keenoy, John J., St. Louis
Keffler, Karl L., St. Louis
Kehoe, John J., Maplewood
Keim, John H., Cape Girardeau
Keim, John P., St. Louis
Keith, Willis E., Kansas City
Keller, Joseph M., St. Louis
Keller, Louis, St. Louis
Keller, Maurice J., St. Louis
Keller, Robert M., Wentzville
Kellett, John G., Webster Groves
Kelley, Gilbert B., Savannah
Kelley, Isaac D., Jr., St. Louis
Kelley, Ralph R., Savannah
Kelley, Robert W., St. Louis
Kelley, Walter L., Affton
Kelling, Douglas G., Waverly
Kelling, Jordan, Waverly
Kelly, Eugene H., Kansas City
Kelly, Marshall W., Jefferson City
Kelly, R. Emmet, St. Louis
Keltner, Raymond O., Raytown
Kempinsky, Warren H., St. Louis
Kendis, Joseph B., St. Louis
Kennard, George K., Kansas City
Kenney, Roy E., Neosho
Kent, Bela K., Kansas City
Kent, Clifford F., Kansas City
Keown, Kenneth K., Columbia
Kepler, Earl C., Fulton
Kerr, David N., St. Louis
Kerr, Frank T., Monett
Kerr, Russell, Kansas City
Kessler, Joseph J., St. Louis
Ketcham, William M., Kansas City
Ketron, Marvin B., Kansas City
Kettelkamp, George D., St. Louis
Ketterman, Grace H., Hickman Mills
Ketterman, Herbert L., Kansas City
Kettner, Edward G., Kansas City
Key, James S., Springfield
Kendig, John H., St. Louis
Keyes, Edward L., St. Louis
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Kibbe, John H., Monroe City
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Kieffer, Roland S., St. Louis
Kieffer, Victor B., Jr., St. Louis
Kiehl, Katharine, Joplin
Kienberger, Paul A., Kansas City
Kiene, Richard H., Kansas City
Kienzle, Edward C., St. Louis
Kilker, Clarence H., St. Louis
Kilker, Donald E., St. Louis
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King, Morris K., St. Louis
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King, Walter R., Kansas City
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Kinsella, Edward D., St. Louis
Kinsella, Maria S., St. Louis
Kinsella, Peter W., St. Louis
Kinsella, Ralph A., St. Louis
Kinsella, Ralph A., Jr., St. Louis
Kipnis, David M., St. Louis
Kirchner, Walter C. G., St. Louis
Kirk, Charlie W., Hopkins
Kirstein, Melvin B., St. Louis
Kirtz, Louis P., Clayton
Kiser, David M., Kansas City
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Kister, George E., St. Charles
Kistner, Robert L., St. Louis
Kistner, William F., University City
Kitchen, William M., Kansas City
Klaff, Daniel D., St. Louis
Klebba, Larry B., Jefferson City
Klein, Andrew G., St. Louis
Klein, Arnold G., St. Louis
Klein, Bert H., St. Louis
Klein, Edward H., Kansas City
Klein, Harry A., St. Louis
Kleinschmidt, Clinton, St. Louis
Klenk, Charles L., St. Louis
Klepinger, Dayton P., Kansas City
Klinge, Frederick W., St. Louis
Klingner, George M., Springfield
Klippel, Allen P., St. Louis
Klippel, Bernhardt W., St. Louis
Kloeppel, Carl F., Kirkwood
Klym, Nicholas, St. Louis
Knabb, Arthur D., Springfield
Knabb, Harris, Springfield
Knabb, Henry F., Coral Gables, Fla.
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Knabb, Henry F., Jr., Springfield
Knabb, Kenneth E., Springfield
Kneal, E. Ellsworth, St. Louis
Kneibert, Fred L., Poplar Bluff
Knepper, Paul A., St. Joseph
Knese, Luke A., St. Louis
Knight, Franklin P., St. Louis
Knight, John S., Kansas City
Knight, Lyle B., Lee's Summit
Knight, William A., Jr., St. Louis
Knipschild, B. F., Marshall
Knoch, H. Kermit, Kansas City
Knock, Henry L., Kirkwood
Knoke, Frederick W., Jr., St. Louis
Knowlton, Norman P., Jr., St. Louis
Knox, Earl R., Kansas City
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Koehler, Charles A., Kansas City
Koehler, John W., Joplin
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Koessel, Arthur W., St. Louis
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Kohler, Louis H., St. Louis
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Kolze, Vernon W., Springfield
Komanetsky, William M., St. Louis
Konzelmann, John A., St. Louis
Kopp, Jules H., St. Louis
Kopp, Leonard J., St. Louis
Koppenbrink, Walter E., Jr., Higginsville
Korn, Robert L., Clayton
Korth, William M., Kansas City
Kotner, Lawrence M., St. Louis
Kountz, William B., St. Louis
Kouri, Martin F., St. Louis
Koutsoumpas, William V., St. Louis
Kovac, Albert P., Kansas City
Kowert, Edward H., St. Louis
Kozal, Francis L., Crystal City
Kozlowski, Albert E., Address Unknown
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Kraft, Jacob, Kansas City
Kramer, Fred, St. Louis
Kramolowsky, Helmuth H., St. Louis
Kraner, Justin F., St. Louis
Kranson, Seymour J., Independence
Kratz, Paul E., Cape Girardeau
Krebs, Joseph M., Clayton
Krebs, Otto S., St. Louis
Krieger, John L., St. Louis
Kromer, Charles, St. Louis
Kubitschek, Paul F., St. Louis
Kuebrich, Thomas C., Ferguson
Kuenzi, Donald E., N. Kansas City
Kuhn, John R., Jr., Joplin
Kuhn, William F., Kansas City
Kulowski, Jacob, St. Joseph
Kurth, Robert K., St. Louis
Kutryb, Walter J., St. Louis
Kurz, Rudolph F., St. Louis
Kuttner, Marianne, St. Louis
Kyger, Fred B., Kansas City
Kyger, John E., Kansas City
Kyner, Thomas A., Kansas City

L

Lachance, Leopold, Centralia
Lacy, N. Eugene, Kansas City
Ladd, Charles B., St. Louis
Ladenson, Roland P., Columbia
LaDriere, Raymond J., St. Louis
Laffoon, France L., Vista, Calif.
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LaHue, Lilburn D., Butler
Lakes, John D., Litchfield, Ill.
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Lally, James J., Kansas City
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Lamar, Robert F., Kansas City
Lamb, F. Patrick, Belleville, Ill.
(Member St. Louis Medical Society)
Lamb, Wanda, St. Louis
Lambert, Marian, Hickman Mills
Lamke, Charles M., Columbia
Lamson, Roy C., Neosho
Lamy, John E., Sedalia
Landau, Daniel B., Hannibal
Landau, William M., St. Louis
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Landor, John H., Columbia
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Lane, Clinton W., St. Louis
Laney, Ronald L., Carlsbad, Calif.
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Lange, Adolph C., St. Louis
Langeluttig, Harry V., Mount Vernon
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Lanier, Earl W., St. Louis
Laning, J. H., Kansas City
Lankford, Harold D., Mexico
Lanning, Richard C., Ste. Genevieve
Lanning, Robert J., Hannibal
Lansche, Elmer A., St. Louis
Lansche, W. Edward, St. Louis
Lapi, Angelo, Kansas City
Lapi, Ruth M., Kansas City
Lapp, Harry C., Kansas City
Larimore, Joseph W., St. Louis
Larkin, Rosemary R., St. Louis
Larsen, Kenneth V., St. Louis
Larson, Paul U., St. Louis
LaSalle, Michael W., Kansas City
Lassar, Gilbert N., St. Louis
Latham, Kenyon S., California
Latham, Raymond W., Kansas City
Lattinville, Henry E., St. Louis
Lau, Gustav A., St. Joseph
Laurenzana, Frank P., Kansas City
Lawless, Charles L., Marshall
Lawrence, George H., St. Louis
Lawrence, John R., Marshall
Lawrence, John V., St. Louis
Lawton, John T., St. Louis
Lawton, Lawrence M., St. Louis
Lawton, Thomas P., St. Louis
Layton, Ira C., Kansas City
Leahy, John G., Clayton
LeBlanc, Leo J., St. Louis
Lederer, Charles M., Warrensburg
Lederman, Joseph, St. Louis
Lee, Carleton H., St. Joseph
Lee, George C., Kansas City
Lee, Gerald B., St. Louis
Leech, Charles A., Columbia
Leech, Maurice P., Fayette
Legner, Stanley G., Perryville
Lehner, Richard L., Kansas City
Leidinger, Karl J., Republic
Leifer, William W., Kansas City
Leitch, Cecil G., Blue Springs
Leitz, Frank B., Kansas City
Lembeck, Joseph A., St. Louis
Lemmon, George B., Springfield
Lemmon, G. Bruce, Jr., Springfield
Lenobel, Milton I., Clayton
Lentz, Clark H., Kansas City
Lentz, Harold C., Neosho
Leo, William A., Kansas City
Leonhardt, Erwin M., St. Louis
Lerner, Abe F., Clayton
Lerwick, Everett R., St. Louis
Leslie, Charles H., Kirkwood
Leslie, James F., Springfield
Leslie, J. Paul, Jefferson City
Leslie, James T., Jefferson City
Levey, Harry B., Kansas City
Levey, Simon A., St. Louis
Levin, Marvin E., University City
Levin, Sidney S., St. Louis
Levine, Ervan L., Vandalia
Levitt, Joseph, St. Louis
Levy, Irwin, St. Louis
Lewellen, Charles H., Louisiana
Lewellen, Charles P., Louisiana
Lewin, Wilbur H., St. Louis
Lewis, James E., Jr., St. Louis
Lewis, Ray B., Columbia
Lewis, Revis C., Kansas City
Ley, Albert P., St. Louis
Leydig, Stanley M., St. Louis
Lichtor, Alexander, Kansas City
Lichtor, Joseph M., Kansas City
Lichty, Charles A., Shelbina
Lieb, Francis X., St. Louis
Lieb, Otto, St. Louis
Lieberman, B. Albert, Jr., Kansas City
Lieberman, David M., St. Louis
Liebmann, Fritz M., St. Louis
Liersch, Joseph C., Kansas City
Liese, Grover B., St. Louis
Liggett, Hiram S., St. Louis
Lilly, Terry E., Sr., Kansas City
Lilly, Terry E., Jr., Kansas City

Limbaugh, Walter R., Hayti
Lindeman, Carl H., St. Louis
Lindquist, Carl N., Kansas City
Link, Alexander J., St. Louis
Link, Vance E., Independence
Linville, Howard E., Kansas City
Lipschitz, Ervin, Clayton
Lipsitz, Ellis S., St. Louis
Lischer, Carl E., St. Louis
Lissack, Edmund, Concordia
Liston, Odus, Oak Grove
Littauer, David, St. Louis
Little, Monroe H., St. Louis
Littmann, Lewis E., St. Louis
Litton, Lyle D., Springfield
Litzow, Louis T., St. Louis
Lockhart, Charles E., Springfield
Lockhart, William G., St. Joseph
Lodwick, Gwilym S., Columbia
Loeb, Virgil, Jr., St. Louis
Loeffel, Ellen S., St. Louis
Loewy, Louise B., Kansas City
Logan, James A., Warsaw
Logue, John, Columbia
Lohr, Curtis H., St. Louis
Lohr, Robert W., Florissant
Lohrentz, Lois H., Kansas City
Loitman, Bernard, St. Louis
Londe, Sol, St. Louis
London, Stanley L., St. Louis
Lonergan, Warren M., St. Louis
Long, Charles L., Jr., St. Louis
Long, David S., Harrisonville
Long, Forrest C., Savannah
Long, Frank B., St. Louis
Long, Frank B., Sedalia
Long, Robert S., Kansas City
Longenecker, Joe L., Joplin
Lonsway, Maurice J., St. Louis
Lonsway, Maurice J., Jr., St. Louis
LoPiccolo, Vincent J., St. Louis
Lord, Richard E., St. Louis
Lottes, James O., St. Louis
Loughead, John R., Poplar Bluff
Lourie, Herbert, Manlius, N. Y.
(Member St. Louis Medical Society)
Love, Drury M., Kansas City
Love, Robert W., Jr., Millingtown, Tenn.
(Member Jackson County)
Love, Walter S., Nevada
Loving, B. Rush, Ballwin
Lovinggood, Thomas A., Cape Girardeau
Lowe, Alvin L., Sedalia
Lowe, Horace A., Springfield
Lowe, Horace A., Jr., Springfield
Lowell, Paul, Kansas City
Lowenstein, Paul S., St. Louis
Lowney, John F., Columbia
Lowrey, Ford J., Kansas City
Loyd, Earl L., Jefferson City
Loyd, Herlan O., Jefferson City
Lucas, John H., Brookfield
Lucido, Joseph L., St. Louis
Lucke, Eugene M., Hannibal
Luckenbill, Paul T., Plattsburg
Luckey, Horace L., Maplewood
Luedde, Fullerton W., St. Louis
Luedde, Philip S., St. Louis
Luh, Andrew, St. Louis
Luke, Herbert K., St. Louis
Luman, Frank E., Edina
Lund, Herluf G., St. Louis
Lund, Robert H., Clayton
Lundgren, Fred H., Jr., Kansas City
Luppens, Albert F., Lee's Summit
Lurie, Harold H., Springfield
Lusk, Charles A., Jr., Butler
Luten, Drew W., St. Louis
Luter, Carter W., Butler
Lutkewitte, Joseph F., St. Marys
Lutz, Martin H., St. Louis
Lyddon, Harold R., Jr., Kansas City
Lyle, Ray M., Kansas City
Lyle, Robert R., Versailles
Lyman, Edward H., St. Louis
Lynxwiler, Chester P., St. Louis
Lyttle, William R., Rolla
Lyttle, Garnet C., St. Louis
Lytton, George J., Kansas City
Lytton, William B., Clayton

Mc

McAdam, Charles R., St. Louis
McAfee, C. Alan, St. Louis
McAlester, Andrew W., Liberty
(Member Jackson County)
McAlhany, Howard J., Springfield
McArtor, Thomas R., Browning
McBurney, Alexander A., Stockton, Calif.
(Member Saline County)
McBurney, Charles A., Slater
McCall, Edwin L., Brentwood
McCalla, John P., Kansas City
McCallum, Andrew J. C., Aurora
McCann, John F., St. Louis
McCann, Louis P., Nevada
McCanse, Raymond A., Kansas City
McCarroll, Henry R., St. Louis
McCarthy, Eugene F., St. Louis
McCarthy, John M., St. Louis
McCarthy, Thomas D., Ferguson
McCarthy, William F., Blue Springs
McCaughan, John M., St. Louis
McClanahan, Robert C., Kansas City
McCloskey, R. Bruce, Webster Groves
McClure, David N., Clayton
McClure, Thomas C., Sikeston
McConchie, James E., Independence
McCorkle, E. Lee, Marshall
McCormick, James E., Kansas City
McCoy, Frederick J., Kansas City
McCoy, Warren R., Caruthersville
McCracken, Samuel R., Excelsior Springs
McCraw, Doyle C., Bolivar
McCubbin, Clarence R., Kansas City
McCullough, Campbell C., Kansas City
McCunniff, William B., Kansas City
McDaniel, John R., St. Joseph
McDermott, Alfred E., Perryville
McDonald, Bruce P., Kansas City
McDonald, Eugene F., Jackson
McDonald, George H., St. Louis
McDonald, Terrence J., Tipton
McDonald, Victor G., Jr., Kansas City
McDonald, Wilbur P., St. Joseph
McDonnell, John F., Kansas City
McDowell, Frank, St. Louis
McElroy, Glenn L., Columbia
McElvain, Robert C., St. Louis
McFadden, James F., St. Louis
McFadden, James F., Jr., St. Louis
McFarland, Morris D., Kansas City
McGannon, Paul T., Kansas City
McGee, John R., St. Louis
McGinnis, Byron J., St. Louis
McGinnis, William F., Clayton
McGinty, Charles P., Cape Girardeau
McGlothlan, Arthur B., St. Joseph
McHale, Thomas C., Kansas City
McHaney, John W., Jefferson City
McIntire, Emery J., Carthage
McIntyre, A. N., Clinton
McIntyre, John D., Kansas City
McKaskle, Clarence W., Caruthersville
McKee, Joseph W., Kansas City
McKee, Oliver A., Kirkwood
McKee, Wallace P., Kansas City
McKinstry, Karl V., DeSoto
McKittrick, James E., St. Louis
McKnelly, William V., Jefferson City
McLain, B. M., Poplar Bluff
McLean, Harry A., St. Louis
McLean, Royal C., Kirkwood
McLelland, Richard I., St. Louis
McLeod, John, Kansas City
McMahan, John H., St. Louis
McMahon, Alphonse, St. Louis
McMahon, Bernard J., Clayton
McManamon, Thomas V. Florissant
McMillan, Thomas E., Kansas City
McMurray, Herbert C., Ballwin
McMurtry, Leonard K., Moberly
McNalley, Frank P. Clayton
McNalley, Michael, St. Louis
McNamara, John J., Florissant
McNamee, William F., St. Louis
McNearney, Joseph, St. Louis
McNeel, Lee A., Jr., Greenfield
McNew, William T., Carthage
McPhee, William R., Kansas City
McPheeters, James W., Poplar Bluff
McPheeters, James W., Jr., Poplar Bluff
McPherson, Owen P., Grandview
McPike, Lloyd H., Joplin
McSwiney, John G., St. Louis
McVay, James R., Kansas City
McVay, James R., Jr., Kansas City

M

Maas, Hermann, St. Louis
Mabrey, John P., Plattsburg
Macauley, Bernard J., Poplar Bluff
MacBryde, Cyril M., Kirkwood
Macdonald, William C., St. Louis
Macdonnell, Carey R., Marshfield
Macdonnell, Thomas M., Marshfield
Machek, Otaker, St. Louis
MacInnis, Florence E., Kansas City
Mack, Mary L., Address Unknown
(Member Jasper County)
Mack, Robert E., St. Louis
Macko, Joseph R., St. Louis
Maclean, John A., Los Angeles, Calif.
(Member Jackson County)
MacNaughton, Robert A., Kansas City
Macnish, James M., St. Louis
Macon, William L., Jr., St. Louis
Maddox, Albert R., Sedalia
Maddox, John D., Joplin
Maddux, William P., Springfield
Madison, Waite H., Marshall
Magaletta, George E., St. Louis
Magee, Charles D., St. Louis
Magee, Robert L., El Dorado Springs
Magee, William E., St. Louis
Magidson, Joseph, Clayton
Magill, Joseph S., Milan
Magness, Guy N., St. Louis
Magness, William C., Branson
Magnin, Richard L., St. Joseph
Mahe, George A., Clayton
Maher, Robert W., Springfield
Maher, Thomas F., St. Louis
Mairs, Edgar J., Trenton
Maizus, Saul H., St. Louis
Major, Hermon S., Kansas City
Malinoski, Mitchell V., Poplar Bluff
Malles, A. Conrad, St. Louis
Mandler, George, Chillicothe
Manganaro, Frank J., St. Louis
Mangels, Kenneth A., Independence
Manion, Peter J., St. Louis
Mannis, Ben G., St. Louis
Mansur, Edward E., Miami, Fla.
(Member Cole County)
Manting, George, St. Louis
Mantz, Frank A., Jr., Kansas City
Maple, Francis M., Springfield
Maples, Floyd H., Mount Vernon
Marcus, Morris D., St. Louis
Margolis, Richard M., Florissant
Margulis, Alexander R., St. Louis
Markel, Arthur D., Poplar Bluff
Marks, Mark M., Kansas City
Marmor, William A., St. Louis
Mars, Hartley F., Forsyth
Marsh, Alice, Pleasant Hill
Marshall, Alfred H., Charleston
Marshall, Cameron F., Kansas City
Marshall, Wilbur J., Springfield
Marston, Warren G., St. Louis
Martin, Andrew D., Sikeston
Martin, Charles E., Ferguson
Martin, Forrest L., Nevada
Martin, Frederick W., Jr., St. Louis
Martin, John N., St. Joseph
Martin, Lucia V., St. Louis
Martin, Maynard W., Houston, Tex.
(Member St. Louis Medical Society)
Martin, Raymond T., St. Louis
Martin, Wilfred E., Odessa
Martin, W. J., Louisiana
Martt, Jack M., Columbia
Martz, John C., Webster Groves
Marx, Marvin H., St. Louis
Mason, Roy E., St. Louis
Masor, Nathan A., Butler
Massie, Edward, St. Louis
Masters, William H., St. Louis
Mastin, Edward V., St. Louis
Masucci, Joseph M., Kansas City
Matteson, Frank B., Grant City
Matthews, John G., St. Louis
Matthews, John I., Jefferson City
Mathewson, Hugh S., Kansas City
Mattis, Robert D., Clayton
Maughs, Sydney B., St. Louis
Max, Paul F., St. Louis
Maxey, Hugh W., Jefferson City
Maxson, T. Reed, Warrensburg
Maxwell, Richard W., University City
May, Albert L., Jr., Poplar Bluff
May, Benjamin F., St. Louis
May, James W., Kansas City
Mayer, John H., Jr., Kansas City
Mayer, Robert A., St. Louis
Mayfield, James L., Crystal City
Mays, Frank G., Washington
Maze, Lawrence E., St. Louis
Mead, Samuel T., Slater
Meador, James R., Clayton
Meagher, Arthur J., St. Louis
Meares, Cecil H., Jr., Joplin
Medler, Francis J., St. Louis
Mehan, George T., St. Louis
Meier, Francis X., Jefferson City
Meinberg, William H., St. Louis
Meiners, Edwin P., St. Louis
Meiners, Theodore M., Webster Groves
Meinershagen, Charles W., Jefferson City
Meisenbach, A. E., St. Louis
Melgaard, S. R., Kansas City
Melick, William F., St. Louis
Meluney, Solomon E., St. Joseph
Mendelsohn, Robert S., St. Louis
Mendelson, David F., St. Louis
Mendonsa, Elsa L., University City
Mendonsa, Lawrence E., St. Louis
Menne, Marvin G., Ironton
Merenda, Sam J., St. Louis

Meriwether, Don R., Mission, Kansas
(Member Jackson County)
Merklin, Anton L., St. Louis
Merrims, Theodore, University City
Merritt, Burch A., St. Louis
Merryman, Charles H., Senath
Merz, Jean J., St. Louis
Mestres, Hugh M., St. Louis
Metz, Charles O., St. Louis
Meyer, Claude B., Nixa
Meyer, Curtis A., St. Louis
Meyer, Herman M., St. Louis
Meyer, James E., Ballwin
Meyer, Oscar D., St. Louis
Meyer, Paul W., Kansas City
Meyerhardt, Milton H., St. Louis
Meyers, Harold L., Kansas City
Meyers, John B., St. Louis
Meyers, Montague M., St. Louis
Mezera, Raymond A., University City
Michael, Kenneth D., St. Louis
Michael, Vernon E., St. Louis
Michaelis, Charles E., Fredericktown
Michaelres, John F., Maplewood
Middleman, Isadore C., St. Louis
Middleton, John W., Louisiana
Mier, Thomas M., St. Louis
Milder, Benjamin, St. Louis
Miles, George O., Kansas City
Miles, Paul W., St. Louis
Miller, Charles, Jr., Kirkwood
Miller, Charles W., St. Louis
Miller, Clinton L., Lee's Summit
Miller, Clyde S., Waynesville
Miller, D. Herbert, Montgomery, Ala.
(Member Chariton-Macon-Monroe-Randolph Counties)
Miller, David V., Poplar Bluff
Miller, Gerald L., Kansas City
Miller, Harold W., Willow Springs
Miller, Howard S., Macon
Miller, James E., St. Louis
Miller, Leroy J., Columbia
Miller, Max I., Kansas City
Miller, Norman C., St. Louis
Miller, Oliver J., Cape Girardeau
Miller, Walter P., Kansas City
Miller, Wilson H., Kansas City
Millikin, Lester A., St. Louis
Mills, Warren B., St. Louis
Milster, Clyde R., St. Louis
Miltenberger, Paul C., Kennett
Minnihan, Robert W., St. Louis
Minton, Robert S., St. Joseph
Missey, Wilburn C., Jr., St. Louis
Mitchell, Andrew D., Kansas City
Mitchell, Ernest, Baytown, Tex.
(Member Jasper County)
Mitchell, Robert H., Kansas City
Mitchell, Roy E., Salem
Mixson, William C., Kansas City
Modlin, John J., Columbia
Moen, Berwyn H., St. Joseph
Molden, Charles A., St. Louis
Molholm, Hans B., Little Rock, Ark.
(Member St. Louis Medical Society)
Monahan, Elmer P., Lenexa, Kansas
(Member Jackson County)
Monat, Seymour, St. Louis
Montani, Charles, St. Louis
Montello, Samuel A., Kansas City
Montgomery, Austin F., St. Louis
Montgomery, James G., Kansas City
Montgomery, John S., Milan
Moody, Jackson C., Harrisonville
Mooney, Justin L., Kansas City
Mooney, Marcel L., Kansas City
Moore, Carl V., St. Louis
Moore, Harry G., St. Louis
Moore, Robert A., Kansas City
Moore, Sherwood, Steeleville
Moore, Walter L., Clayton
Moore, William E., Normandy
Moranville, Benedict A., Columbia
Morehead, William E., Kennett
Morest, F. Stanley, Kansas City
Morfit, John C., St. Louis
Morgan, David B., Kansas City
Morgan, Harry C., St. Louis
Moriarty, Lauren R., Kansas City
Morrin, Kevin C., St. Louis
Morris, Clyde L., Caruthersville
Morris, Harvey E., St. Louis
Morris, Mary E., St. Louis
Morrison, Donald H., Kansas City
Morrison, George B., Nevada
Morrison, T. A., Aurora
Morrow, Raymond L., Kansas City
Morse, Marvin, St. Joseph
Mortensen, Frede, St. Louis
Morton, Paul C., Springfield
Moseley, F. Thomas, Springfield
Moses, Robert A., St. Louis
Moss, Paul, Kansas City
Mosser, Robert S., Independence
Mothershead, John L., St. Joseph
Motzel, Albert J., St. Louis
Mountjoy, Grace S., St. Louis
Mowrey, William O., St. Louis
Moyer, Carl A., St. Louis
Muckerman, Richard I. C., St. Louis
Mudd, James L., St. Louis
Mueller, Clarence E., St. Louis
Mueller, Joseph A., St. Louis
Mueller, Martin J., Kansas City
Mueller, Morris A., Clayton
Mueller, Robert, St. Louis
Mueller, Robert J., St. Louis
Mueller, Wilbur K., St. Louis
Muench, Albert H., St. Joseph
Muench, Ludwig O., Washington
Muenster, Vincent P., St. Charles
Muether, Raymond O., St. Louis
Mullarky, Wilbur A., St. Louis
Mullen, Jack, Bonne Terre
Mullen, Leo M., Kansas City
Mulligan, Leo V., St. Louis
Mullinax, Orr, Marshall
Mullins, Bernard L., N. Kansas City
Multhauf, Cyril J., Kansas City
Mundy, Homer F., St. Joseph
Mundy, William L., Kansas City
Munsch, Augustin P., St. Louis
Munsch, Girard A., Clayton
Murphy, Bernard L., Hannibal
Murphy, George E., St. Louis
Murphy, James P., St. Louis
Murphy, John C., St. Louis
Murphy, Paul, St. Louis
Murphy, Robert J., Kansas City
Muschany, Norman K., St. Louis
Musgrave, David E., Excelsior Springs
Musick, James D., Springfield
Musson, E. K., Macon
Mutshnick, Clara P., St. Louis
Myers, James M., Rolla
Myers, John S., Kansas City
Myers, Robert M., Kansas City
Myers, Wilson A., Kansas City

N

Nagel, Gunther P., St. Louis
Nakada, James R., Clayton
Napper, Marvin L., Springfield
Narahara, Hiromichi T., St. Louis
Naryka, Joseph J., St. Louis
Nash, Francis P., St. Louis
Nash, Helen E., St. Louis
Nash, Homer E., Jr., St. Louis
Nash, W. Hampton, St. Louis
Nathan, Lester J., St. Louis
Natoli, Cornelius A., St. Louis
Neal, M. Pinson, Columbia
Needels, Orval T., Kansas City
Neilson, Arthur W., St. Louis
Neilson, Arthur W., Jr., Victorville, Calif.
(Member St. Louis Medical Society)
Nelson, Bentley A., Kansas City
Nelson, Charles S., Westphalia, Kansas
(Member Jackson County)
Nelson, Fred L., St. Joseph
Nelson, J. Roger, St. Louis
Nemec, Stanley S., St. Louis
Ness, Carl K., St. Joseph
Nesselrode, John H., Independence
Nester, Charles A., St. Louis
Netherton, George F., Cameron
Neu, Leo T., Jr., St. Louis
Neubeiser, Ben L., St. Charles
Neun, William F., St. Louis
Newman, Mary Jane, Cassville
Newman, Percy, St. Louis
Newport, Gerald, Creve Coeur
Newton, William T., St. Louis
Nibbe, Albert F., Bethany
Nichols, Charles E., Marlin, Texas
(Member St. Louis Medical Society)
Nichols, Frank J., Fulton
Nicholson, Ralph L., Excelsior Springs
Nickel, James F., St. Louis
Nickson, Charles E., Jr., Independence
Nicolai, Charles H., St. Louis
Nicolay, Kenneth S., Kansas City
Niedermeyer, Edward L., Tarkio
Niedermeyer, George J., St. Louis
Niesen, Frank J., St. Louis
Nigro, Dominc M., Kansas City
Nigro, E. Robert, Kansas City
Nigro, Joseph A., Kansas City
Nishi, James A., St. Louis
Nista, Joseph A., Cleveland, Ohio
(Member St. Louis Medical Society)
Nix, Winston K., Marshall
Nixon, Edward E., Gallatin
Noah, Joseph W., St. Louis
Nofles, James W., St. Louis
Nolan, Charles J., St. Louis
Noller, Henry W., St. Louis
Noltensmeyer, Milton N., Kansas City, Kansas
(Member Jackson County
Norman, Robert M., Ava
Northup, Glenn R., St. Louis
Norton, William H., St. Louis
Nuetzel, John A., Clayton
Nunn, Pat M., Kansas City, Kansas
(Member Jackson County)
Nunnelly, Gordon M., Cape Girardeau
Nussbaum, Paul B., Cape Girardeau
Nussbaum, Robert A., St. Louis
Nye, Robert S., St. Louis

O

Oakley, John E., Clayton
Obermeyer, Charles G., St. Louis
O'Brien, Edward C., St. Louis
O'Brien, Harry F., Mexico
O'Brien, James A., Muskogee, Okla.
(Member Greene County)
O'Brien, Leo A., Kansas City
O'Brien, Robert M., St. Louis
O'Connell, Frank A., Kansas City
O'Connell, Gerald L., Grandview
O'Connell, John, St. Louis
O'Connor, Robert J., Florissant
O'Connor, William B., St. Joseph
O'Dell, Timothy T., Oran
O'Donnell, Joseph V., St. Louis
O'Dowd, James A., St. Louis
Oehler, William F., Cape Girardeau
Oetter, Donald L., St. Louis
Ogilvie, John H., Gravios Mills
Ogura, Joseph H., Ladue
O'Hearne, John J., Kansas City
Ohmoto, Masao, St. Louis
O'Keefe, Joseph D., St. Louis
O'Leary, James L., St. Louis
Olive, George C., Neosho
Oliver, George A., Farmington
Olmsted, William H., St. Louis
O'Malley, Eugene J., St. Louis
O'Malley, James F., Kansas City
O'Neal, Lawrence W., St. Louis
O'Neal, Patricia, St. Louis
O'Neil, James H., Kansas City
O'Neill, John B., St. Louis
Ongjoco, Melchor I., St. Louis
Oppenheimer, Henry E., Clayton
O'Reilly, D. Elliott, Clayton
Orenstein, Joseph M., St. Louis
Orgel, M. Norman, St. Louis
Osborne, Charles D., Sedalia
Osgood, George M., Prairie Village, Kans
(Member Jackson County)
Ossman, Julian A., Jefferson City
Ost, Mark D., Kansas City
O'Sullivan, George A., St. Louis
Ott, Harold J., Maplewood
Ottensmeyer, Charles D., Overland
Otto, Thomas G., Cape Girardeau
Overesch, Harry B., Kansas City
Overholser, Milton D., Columbia
Owen, James W., Jr., St. Louis
Owen, Robert F., St. Louis
Owens, Graham J., Kansas City
Owens, Hugh H., Kansas City
Owens, Michael J., Kansas City
Owens, Richard L., Kansas City
Owens, Robert H., Kansas City
Ozar, Milton B., Kansas City

P

Paddock, Charles S., Joplin
Paddock, Richard, St. Louis
Padfield, Earl G., Jr., Kansas City
Page, Jesse W., Ypsilanti, Mich.
(Member St. Louis County)
Paine, Robert, St. Louis
Painter, Andrew E., Portageville
Painter, Lattie B., Jr., Portageville
Pakula, Sidney, Kansas City
Palazzo, Frank A., St. Louis
Palcheff, Chris L., Springfield
Palenske, Robert L., Hornersville
Paletta, Francis X., St. Louis
Pallett, Harold A., Kansas City
Papp, Sandor D., Joplin
Parashak, Paul M., St. Louis
Parato, John M., St. Louis
Pareira, Morton D., Clayton
Paris, William H., St. Louis
Park, George M., Eureka
Park, William I., Jr., Springfield

Parker, Arthur C., Jr., Poplar Bluff
Parker, Brent M., St. Louis
Parker, Elmer L., Kansas City
Parker, H. Graham, Platte City
Parker, Hubert M., Kansas City
Parker, Robert H., N. Kansas City
Parker, Thomas W., University City
Parker, William, St. Louis
Parkhurst, Charles L., Houstonia
Parks, Stephen, Bloomfield
Parsons, Ernest H., St. Louis
Parsons, Eugene O., Kansas City
Parsons, Richard P., St. Louis
Pascoe, James J., Nevada
Passanante, Bartholomew M., St. Louis
Passman, Harold, Kansas City
Pate, Otho S., N. Kansas City
Patterson, Donald R., Joplin
Patterson, Grover S., Carthage
Patterson, John R., Kansas City
Patterson, William R., Warrensburg
Patterson, William W., Kansas City
Pawol, S. E., St. Louis
Payne, Bryan T., Lexington
Payne, John W., Columbia
Payne, Meredith J., St. Louis
Pearl, John F., St. Clair
Pearse, Roy W., Jr., Nevada
Pearson, Paul E., Kansas City
Peck, Chester R., Jr., Kennett
Peckham, John W., St. Louis
Peden, Burnet W., Clayton
Peden, Joseph C., St. Louis
Peden, Joseph C., Jr., St. Louis
Peeler, James O., St. Louis
Peete, Don C., Kansas City
Pelz, Mort D., St. Louis
Pemberton, Charles W., Mendon
Penn, Robert M., Silex
Penner, Stanley, Kansas City
Penney, David L. St. Louis
Penninger, William H., Springfield
Pennington, Francis E., St. Louis
Pennoyer, James, Webster Groves
Perll, Maurice F., Kansas City
Perll, Rita D., Kansas City
Perna, Vincent P., Columbia
Pernoud, Flavius G., Jr., St. Louis
Pernoud, Michael F., St. Louis
Perry, David C., Mound City
Perry, H. Mitchell, Kirkwood
Perry, John M., Princeton
Perry, Ralph, Kansas City
Perry, William D., St. Louis
Peters, Evelyn L., Kansas City
Petersen, Eugene G., Kansas City
Petersen, Harold E., St. Joseph
Peterson, Carl M., Kansas City
Peterson, George L., Kansas City
Peterson, Milton C., Kansas City
Peterson, Stanley S., Springfield
Peterson, Walter R., Kansas City
Petry, Ezra L., Kansas City
Pettit, Manson B., St. Joseph
Peugnet, Hubert B., St. Louis
Pfeffer, Robert I., St. Joseph
Pfeifer, Oliver C., St. Louis
Pfuetze, Edwin L., Kansas City
Phillips, Hanford, St. Louis
Piccione, Leonard M., St. Louis
Pickard, Clarence M., Columbia
Pickard, Nicholas S., Kansas City
Pickens, E. Allen, Nevada
Pickens, Edgar E., Kansas City
Pickrell, Claude D., Clayton
Pierron, John B., Kansas City
Pifer, Lawrence H., St. Joseph
Pileggi, Felix A., N. Kansas City
Pingelton, William B., Columbia
Pinsker, Oscar T., Kansas City
Piper, August T., St. Louis
Piper, Donald K., Kansas City
Pipes, Keith E., Brentwood
Pipkin, Garrett, Kansas City
Pittam, Radford F., Hutchinson, Kansas
(Member Jackson County)
Plag, Albert F., St. Louis
Platt, William R., Clayton
Platz, John H., Carrollton
Plesons, John D., St. Louis
Ploehn, Emma, St. Louis
Plowman, Edward M., Hannibal
Plumlee, William C., Springfield
Plumpe, W. Tupper, St. Louis
Poff, Joseph H., Albany
Poggemeier, William H., Jr., St. Charles
Polk, George M., Lee's Summit
Polk, John W., Springfield
Pollack, Maxwell A., St. Louis
Pollock, Leo H., Kansas City
Poor, Carl W., Neosho
Popp, Carl G., Sikeston
Porporis, Arthur A., St. Louis
Porter, Louis, Kansas City
Porter, Russell, Tucson, Ariz.
(Member Clay County)
Porterfield, John F., Columbia
Portuondo, Bonaventura C., St. Louis
Post, Cyril A., Poplar Bluff
Post, John P., Washington
Post, M. Hayward, St. Louis
Post, Winfred L., Joplin
Potashnick, Robert, St. Louis
Potter, Allen B., Bowling Green
Potter, Caryl A., Jr., St. Joseph
Potter, Lee G., Kansas City
Potter, Reese H., St. Louis
Potter, Thompson E., St. Joseph
Powell, Carl A., St. Louis
Powell, Earl A., St. Louis
Powell, Edwin M., Springfield
Powell, Nelson E., Kansas City
Powell, Rudolph V., St. Louis
Powers, John M., Kansas City
Powers, Pierce W., St. Louis
Pranger, Sylvester H., St. Louis
Prater, Bill G., Springfield
Prentiss, Harry S., Kansas City
Presnell, Cleitus A., St. Louis
Press, Maurice J., St. Louis
Preston, Albert, Jr., Kansas City
Price, Charles H., Cassville
Price, Kenneth C., St. Louis
Price, Robert P., St. Joseph
Printz, Joseph H., Kansas City
Printz, Otto J., Kansas City
Probstein, Jacob G., St. Louis
Proctor, Donald C., Sedalia
Proetz, Arthur W., St. Louis
Pruett, Burchard, S., St. Louis
Pruett, Hubert S., St. Louis
Pruett, Paul L., Springfield
Pucci, Gregory L., Kansas City
Puckett, Cordelia, St. Louis
Pugh, Richard G., Independence
Purcell, Elmer M., Springfield
Purcell, Harry K., St. Louis
Pyne, Herbert S., St. Louis

Q

Quer, Erich A., Kansas City
Quintana, Manuel M., Address Unknown
(Member Perry County)
Quistgard, Paul C., Kansas City

R

Rachlin, Maxwell, Brentwood
Rader, Ada B., Martin City
Rader, George B., St. Louis
Raemdonck, Alphonse J., St. Louis
Ragland, John E., Ballwin
Ragsdale, George M., Paris
Rainey, Robert, St. Louis
Rainwater, Elmer H., Springfield
Ramey, Ehret O., Kansas City
Ramos, John F., Jr., Kansas City
Ramos, Raoul L., St. Louis
Ramsey, Robert H., Ferguson
Randall, Don Q., St. Charles
Randall, Leslie, Licking
Rannie, Paul R., Independence
Ransdell, James F., Hayward, Calif.
(Member Boone County)
Rapp, Earl L., Hannibal
Rapp, Harold B., Cape Girardeau
Rawlins, Fred E., Cape Girardeau
Rawlins, Kelly, Holden
Ray, C. Thorpe, Columbia
Ready, James H., Florissant
Reas, Herman W., St. Louis
Rector, Joe L., Jr., Kansas City
Redington, James C., Jr., Clayton
Redmond, William, St. Joseph
Reeder, Charles C., New Madrid
Reese, A. Victor, Webster Groves
Reh, Edward P., St. Louis
Reich, Harry A., St. Louis
Reich, Oliver F., Kimmswick
Reichert, M. Cecelia, St. Louis
Reiches, Aaron J., St. Louis
Reid, James A., Marshall
Reid, William F., Richmond, Va.
(Member St. Louis Medical Society)
Reider, Richard A., St. Louis
Reilly, Leo J., St. Louis
Reilly, Pierce J., St. Louis
Reineck, John A., St. Louis
Reinhard, Edward H., St. Louis
Reinhardt, George R., Kansas City
Reis, Carl J., St. Louis
Reiss, Eric, University City
Reister, Dorothy D., Kansas City
Reister, Philip D., Kansas City
Reitman, Stanley, University City
Reitz, Carl H., Kansas City
Remley, George C., Kansas City
Rendleman, George F., St. Louis
Rennard, Marvin, St. Louis
Repetto, Albert M., St. Louis
Repp, Theodore J., St. Louis
Reuter, Louis A., St. Louis
Revare, Paul, N. Kansas City
Reynolds, Clarence C., Kansas City
Reynolds, Fred, St. Louis
Reynolds, Garland A., Cape Girardeau
Reynolds, James R., Neosho
Rhoades, Arthur B., Kansas City
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Rice, Carl E., Hillsboro
Rice, Earl R., Ft. Lauderdale, Fla.
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Richards, Frank O., St. Louis
Richardson, George A., Union
Richardson, Marion W., Kansas City
Richardson, Reginald G., Jefferson City
Richardson, William R., Union
Richert, Robert C., Kansas City
Richman, Elmer, St. Louis
Richter, William B., Stockton
Riddell, Richard V., St. Joseph
Ridings, Harold D., Cape Girardeau
Ries, Douglas A., Richmond Heights
Riffel, Gordon W., Bourbon
Rifkin, Shale M., St. Louis
Riggio, Salvatore N., St. Louis
Rigney, Levi M., Springfield
Riley, Fred P., Perryville
Riley, John J., St. Louis
Riley, Ralph D., St. Louis
Riley, Ralph W., Lexington
Riley, William H., St. Louis
Riller, Lowell E., Kansas City
Ringo, Henry J., St. Louis
Rinkel, Herbert J., Kansas City
Rinker, Carl T., Jr., Macon
Riordan, Lawrence M., St. Louis
Ritchie, Frances R., St. Louis
Ritter, Hubert A., St. Louis
Ritter, Paul J., St. Louis
Ritter, Raymond A., Cape Girardeau
Ritterbusch, James K., Fulton
Roberson, John H., Lilbourn
Roberts, Grosvenor G., Kansas City
Roberts, Harold K., Clayton
Roberts, Harold M., Kansas City
Roberts, John P., Kirkwood
Roberts, John R., St. Louis
Roberts, Lacy M., Kansas City
Roberts, Paul A., Sweet Springs
Roberts, Sam E., Kansas City
Robertson, Frank G., St. Louis
Robertson, LeRoy L., St. Louis
Robichaux, Eugene B., Excelsior Springs
Robichaux, Eugene C., Excelsior Springs
Robins, Eli, St. Louis
Robinson, Arthur W., Kansas City
Robinson, Edith C., St. Louis
Robinson, Edward E., Adrian
Robinson, Ernest K., Kansas City
Robinson, George G., Hunnansville
Robinson, G. Wilse, Jr., Kansas City
Robinson, John A., Edgerton
Robinson, William J., Kansas City
Robison, James T., Jr., Kansas City
Roblee, Melvin A., St. Louis
Roche, Maurice B., St. Louis
Rodeman, John M., Sedalia
Roden, J. S., Columbia
Rodes, Ned D., Mexico
Rodgers, Elrie P., Columbia
Rodgers, Samuel U., Kansas City
Roe, Allen N., Wentzville
Roebber, Harry M., Bonne Terre
Roehrs, Marvin E., Marshall
Rogers, Cyril H., St. Louis
Rogers, John A., University City
Rogers, John T., St. Joseph
Rohlfing, Edwin H., St. Louis
Rohlfing, Walter H., St. Louis
Rohr, Joseph H., Kansas City
Roller, Merrill J., Hannibal
Rollins, Harry D., Winona
Rolufs, Lloyd S., Kirkwood
Rolwing, E. C., Charleston
Ronald, Douglas C., Butler
Roodman, Herman J., Clayton
Roper, Stanley D., Ozark
Rose, Charles W., Kansas City
Rose, Dalton K., Clayton
Rose, Frank H., Albany
Rosecan, Marvin, St. Louis
Rosen, Charles S., St. Louis

Rosen, Max, Springfield
Rosenbaum, Harry D., St. Louis
Rosenbaum, Herbert E., St. Louis
Rosenberg, Henry E., St. Louis
Rosenberg, Irwin K., St. Louis
Rosenfeld, Henry, St. Louis
Rosenthal, Irwin I., St. Joseph
Ross, Herman C., Brentwood
Rost, William B., St. Joseph
Roter, Alexander M., St. Charles
Roth, John J., St. Louis
Rother, Paul H., St. Charles
Rothman, David, St. Louis
Rothweiler, Robert J., St. Louis
Rotter, Julius C., St. Louis
Roufa, Joseph F., St. Louis
Roulhac, George E., St. Louis
Roundy, Collis I., St. Joseph
Rouse, David M., Mexico
Rouse, Ernest T., St. Louis
Rowlette, Avery P., Moberly
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Royce, James J., Noel
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Royston, Grandison D., Hope, Ark.
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Rubin, Robert, St. Louis
Rubin, Sidney, Kansas City
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Ruddell, George W., St. Louis
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Rufe, John R., Kansas City
Ruff, T. Eugene, Poplar Bluff
Ruhling, Rudy, St. Louis
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(Member Ozarks Medical Society)
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Rutledge, Paul E., Kirkwood
Rutledge, William J., Campbell
Ryan, John B., Washington
Ryan, John H., St. Joseph
Ryan, John J., Clayton
Ryan, Robert E., St. Louis

S

Sachar, Leo A., St. Louis
Saferstein, A. Lester, Kansas City
St. John, Dewey, St. Louis
St. John, Thomas C., St. Louis
Sala, Jose M., Columbia
Saladino, Anthony, Kansas City
Sale, Llewellyn, St. Louis
Sale, Llewellyn, Jr., St. Louis
Salisbury, William J., St. Louis
Sammons, Harry C., St. Louis
Sample, George A., Chaffee
Samuelson, Edward A., Kansas City
Sanders, George E., Excelsior Springs
Sanders, Harmon U., Jr., Independence
Sanders, Robert D., St. Louis
Sanders, Theodore E., St. Louis
Sanders, William F., Kansas City
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Santiago, Miguel, St. Louis
Saper, Philip, Lee's Summit
Sargent, Alden P., Sikeston
Sargent, John P., Sikeston
Sarno, Samuel M., Morehouse
Sassin, Edmond F., St. Louis
Sato, George, St. Louis
Satterfield, Val B., Chesterfield
Sauer, Gordon C., Kansas City
Sauer, W. Nicholas, St. Louis
Saunders, Everett L., Independence
Sausville, Albert J., St. Louis
Sawyer, Floyd E., N. Kansas City
Sawyer, James, St. Louis
Scanlon, Robert C., Springfield
Scarpellino, Louis, Kansas City
Schaerer, Jacques P., St. Louis
Schaerrer, Hans, Kansas City
Schaerrer, William C., Kansas City
Schaper, Ernest H., St. Louis
Schattyn, Martyn, St. Louis
Schechter, Samuel E., Clayton
Scheele, Paul M., Brentwood
Scheer, George E., St. Louis
Scheff, Harold, St. Louis
Scherman, Victor E., St. Louis
Schertz, Truman B., N. Kansas City
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Schewe, Elmer J., Jr., Columbia
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Schlenker, Lawrence, St. Louis
Schlicht, Mabelle B., Webb City
Schluer, Elmer P., St. Louis
Schlueter, Newell W., St. Louis
Schmidt, Charles A., Gerald
Schmidt, Edwin H., St. Louis
Schmidt, Edmund M., St. Louis
Schmidt, Herbert H., Washington
Schmiemeier, Herman A., St. Louis
Schmiemeier, Roy H., St. Louis
Schmitz, Edgar F., St. Louis
Schneider, Sam, St. Louis
Schneider, Vincent A., St. Charles
Schnoebelen, Paul C., St. Louis
Schoeberl, Cletus B., Joplin
Schopp, Alvin C., St. Louis
Schorer, Edwin H., Kansas City
Schottman, Gerhard W., Jr., Kansas City
Schrepel, Herbert O., St. Louis
Schroeder, Henry A., St. Louis
Schroeder, Sidney O., Liberty
Schulte, Gregory A., Joplin
Schultz, Loraine E., Columbia
Schultz, Samual, St. Louis
Schuman, Stanley H., Ann Arbor, Mich.
(Member St. Louis County)
Schuster, Joseph M., Jr., Cincinnati, Ohio
(Member St. Louis Medical Society)
Schutz, Carl B., Kansas City
Schutz, Richard B., Kansas City
Schwartz, Eugene J., Springfield
Schwartz, Frederick O., St. Louis
Schwartz, Henry G., St. Louis
Schwartz, Melvin M., St. Louis
Schwartzman, Bernard, St. Louis
Schwarz, Ralph C., Oak Harbor, Wash.
(Member St. Louis Medical Society)
Schweiss, John F., St. Louis
Schweitzer, Fred C., Jr., Springfield
Sciortino, Gaspare, St. Louis
Sciortino, John S., St. Louis
Scopelite, Joseph A., St. Louis
Scorse, Sidney W., Joplin
Scott, Clive D., Louisiana
Scott, Elijah A., St. James
Scott, Elwin P., St. Louis
Scott, Wendell G., St. Louis
Seabaugh, D. Rusby, Cape Girardeau
Seabaugh, Dayton I. L., Jackson
Seabaugh, Loy R., Cape Girardeau
Seabaugh, Oda L., Cape Girardeau
Seabaugh, Ottis D., Webster Groves
Seabaugh, William O. L., Cape Girardeau
Seabold, John A., University City
Seddon, John W., St. Louis
See, William B., Columbia
Seeley, James J., St. Louis
Seely, Clark W., Kansas City
Seib, George A., St. Louis
Seidel, Donald R., Address Unknown
(Member St. Louis Medical Society)
Senn, Emmett J., Herculaneum
Senne, Herbert C., St. Joseph
Sennott, John S., Jefferson City
Senor, Samuel E., St. Joseph
Senturia, Ben H., St. Louis
Senturia, Hyman R., St. Louis
Serkes, Kenneth D., St. Louis
Sertl, John D., St. Louis
Settle, Emmett B., Rockport
Sevin, Omar R., Rockhall, Md.
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Sewell, Walter S., Springfield
Sewing, Arthur H., St. Louis
Sexauer, Arthur E., Ste. Genevieve
Sexton, Daniel L., St. Louis
Sexton, Elmer E., St. Louis
Shackelford, Horace H., St. Louis
Shahan, Philip T., St. Louis
Shanahan, Mary P., Monroe City
Shaner, John F., St. Louis
Shapiro, Lazare M., Kansas City
Shapleigh, John B., St. Louis
Sharp, Austin R., St. Louis
Shatz, Burton A., St. Louis
Shaw, Carvel T., Hermann
Shaw, William J., Fayette
Shaw, William J., Jr., Fayette
Sheahon, John A., Kansas City
Shecter, Nathan, Kansas City
Sheets, John S., St. Louis
Sheets, Martin E., St. Louis
Shelden, Russell D., Kansas City
Sheldon, John, Kansas City
Shelton, Edward O., Eldon
Shen, Jerome T. Y., St. Louis
Shepherd, Charles T., St. Louis
Sheppard, Lee C., Jr., Columbia
Sherard, Julius C., St. Louis
Sheridan, Edmund R., St. Louis
Sherman, Alfred I., St. Louis
Sherry, Sol, St. Louis
Sherwin, Charles S., St. Louis
Shevlin, Charles F., St. Joseph
Shifrin, Alexander, Kansas City
Shinkawa, Shigeo, St. Charles
Shireman, Kenneth L., Kansas City
Shirey, Arnold G., Hayti
Shobe, Frank O., St. Louis
Shockley, Clarence J., Kansas City
Shofstall, Charles K., Kansas City
Shoss, Milton, Cape Girardeau
Shrader, E. Lee, St. Louis
Shreffler, Algie R., Tavernier, Fla.
(Member St. Louis Medical Society)
Shrout, Cecil B., Bunceton
Shuey, Herbert H., Kansas City
Shull, George D., Jefferson City
Shuman, Joseph S., St. Louis
Shumate, L. St. Clair, Reeds Spring
Shutt, Cleveland H., St. Louis
Shyken, Herman, St. Louis
Shypper, Moses J., Kansas City
Siceluff, Joseph G., Springfield
Siegel, Carl D., Sedalia
Siegel, Peter V., Smithton
Siemers, George E., St. Louis
Siesener, Herbert H., St. Louis
Sievers, Edward F., Miami Beach, Fla.
(Member St. Louis Medical Society)
Sights, Warren P., Jr., Columbia
Signorelli, Andrew J., St. Louis
Silsby, Don H., Springfield
Silsby, Don J., Springfield
Silsby, Harry D., Springfield
Silverberg, Charles, St. Louis
Silvermintz, Saul D., Ladue
Simmons, Benjamin B., St. Joseph
Simmons, Leroy, Sarcoxie
Simms, Otho M., St. Charles
Simon, Bettie H., St. Louis
Simon, David L., St. Louis
Simon, Jerome I., St. Louis
Simon, Sanford, Kansas City
Simon, Selig, St. Louis
Simpson, Albert P., Springfield
Simpson, Eber, St. Louis
Simpson, Emerson L., Springfield
Simpson, Guy L., St. Louis
Simpson, Lloyd, Columbia
Simril, Wayne A., Clayton
Sinclair, Alexander B., Kansas City
Singleton, J. Milton, Kansas City
Sinkler, William H., St. Louis
Sisk, James C., Clayton
Sisson, Richard G., St. Louis
Skeffington, Mary J., St. Louis
Skilling, David M., Jr., St. Louis
Skillman, Robert K., Kansas City
Skinner, John O., Kansas City
Skinner, John S., St. Louis
Skinner, John T., Kansas City
Slaughter, Shelby C., Fredericktown
Slentz, Edwin L., Kansas City
Slentz, William A., Kansas City
Slickman, Robert A., Kansas City
Small, Walter L., Kansas City
Smart, Leon A., St. Louis
Smathers, John H., Florissant
Smiley, William, St. Louis
Smit, Herbert M., St. Louis
Smith, Arthur B., Kansas City
Smith, Audra B., Sikeston
Smith, Benjamin F., Jr., Clayton
Smith, C. Souter, Springfield
Smith, Carl C., Moberly
Smith, Clifton, St. Joseph
Smith, Dale C., Kansas City
Smith, Frank J., St. Louis
Smith, Garland F., St. Louis
Smith, George E., Kirkwood
Smith, Grafton A., Columbia
Smith, Harvey S., Springfield
Smith, Herbert P., St. Louis
Smith, Hubert E., Kansas City
Smith, Hugh R., St. Louis
Smith, Ira T., Kansas City
Smith, J. Earl, St. Louis
Smith, James O., Clinton
Smith, Jason N., Jr., Columbia
Smith, Joe R., Columbia
Smith, John R., St. Louis
Smith, Kathleen, St. Louis
Smith, Louis J., New Madrid
Smith, Milton, St. Lous
Smith, O. D., Overland Park, Kansas
(Member Jackson County)

Smith, Robert M., St. Louis
Smith, Robert S., Portageville
Smith, Robert W., Marceline
Smith, Roland T., Joplin
Smith, Rollin H., West Plains
Smith, Sidney E., St. Louis
Smith, Ulysses S., Hannibal
Smith, William A., Somerton, Ariz.
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Smith, William J., Windsor
Smith, William R., Carthage
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Smull, Ned W., Kansas City
Snead, William H., Jr., Springfield
Sneid, Philip, Kansas City
Snider, Samuel H., Kansas City
Snyder, Edward N., St. Louis
Sommer, Conrad S., St. Louis
Sommer, Ross B., Brentwood
Soule, Samuel D., St. Louis
Spafford, Allen L., Kansas City
Spalding, Wilber B., Plattsburg
Spears, Joe L., Cabool
Spelman, Archibald E., Smithville
Spence, Elbert L., Kennett
Speno, Angelo A., Brentwood
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Spitz, Milton A., Milwaukee, Wis.
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Spitzer, Ernest, University City
Spoeneman, Marlin C., St. Louis
Spoenemann, Walter H., St. Louis
Sportsman, Weldon L., Kansas City
Spratt, John S., Jr., St. Louis
Sprehe, Daniel J., Warrensburg
Spurgeon, Milo J., Columbia
Stecey, Wallace R., Independence
Stacy, Winton T., St. Joseph
Staehle, Melvin E., St. Louis
Staggs, William A., Kansas City
Stahl, Phineas D., St. Louis
Staley, Harry R., Kansas City
Stallard, Donald J., St. Joseph
Stamp, Warren C., St. Louis
Stanfield, Ned M., Jr., St. Louis
Stansbrough, Raymond A., St. Louis
Starke, Helen, Kansas City
Starkloff, Gene B., St. Louis
Starkloff, Max, St. Louis
Statland, Harry, Kansas City
Statland, Morris, Kansas City
Staton, R. Hamilton, Carrollton
Stauffacher, C. Gordon, Sedalia
Stauffer, Harry B., Jefferson City
Stecker, George, St. Louis
Steele, Jack T., Ferguson
Steele, James C., Jr., Hannibal
(Member Jackson County)
Steffen, Lawrence F., Kansas City
Stegman, Elmer G., Raytown
Stein, Arthur H., Jr., St. Louis
Stein, Harry J., St. Louis
Stein, Leonard A., St. Louis
Steinbeck, Herbert D., Union
Steinbeck, Herbert F., St. Louis
Steinberg, Franz U., St. Louis
Steiner, Albert S., St. Louis
Steiner, Alexander J., St. Louis
Stelmach, Walter J., Kansas City
Stephan, August P., Jefferson City
Stephens, LeRoy J., St. Louis
Stephens, Louis F., St. Louis
Stephens, William A., St. Louis
Stephenson, Hugh E., Jr., Columbia
Stergen, Nick E., St. Louis
Sterkel, Richard L., St. Louis
Sterling, Charles E., St. Louis
Sterling, John A., Maplewood
Stevens, Robert W., St. Louis
Stevens, W. R., Waynesville
Stewart, Floyd, St. Louis
Steward, Frances H., St. Louis
Stewart, John W., St. Louis
Stewart, Robert B., Springfield
Stewart, Robert H., Sedalia
Stewart, R. Wendell, Springfield
Stewart, William J., Columbia
Stickle, Arthur W., St. Louis
Stickler, Ralph O., Kirksville
Stindel, Charles E., Webster Groves
Stine, Dan G., Columbia
Stockdale, John C., Houston
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Stockton, Raymond W., Kansas City
Stockwell, A. Lloyd, Kansas City
Stokes, James M., St. Louis
Stokes, Julius B., Excelsior Springs
Stolar, Jacob, St. Louis
Stone, Charles A., St. Louis
Stoneman, William, III, St. Louis
Stotts, Charles S., Prairie Village, Kans.
(Member Jackson County)
Stratemeier, Edward H., Kansas City
Strauchen, Gilbert W., Webster Groves
Strauss, Arthur E., St. Louis
Streetor, Roderick D., St. Louis
Strehlman, Benjamin G., Union
Stricker, Emil A., St. James
Stricker, Harold C., Jefferson City
Strong, Richard M., Hannibal
Stryker, Garold V., St. Louis
Stryker, William I., St. Louis
Stude, William C., St. Louis
Stuart, Byron M., Boonville
Stuart, Daniel D., Brunswick
Stuebner, Roland W., St. Louis
Stutsman, Albert C., St. Louis
Sudholt, Alfred F., Jr., St. Louis
Sugarbaker, Everett D., Jefferson City
Suggett, Finis C., Columbia
Sullivan, B., Hazard, Miami
Sullivan, Clement J., St. Louis
Sullivan, James F., St. Louis
Sullivan, William J., Providence, R. I.
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Summers, Jacob H., Lebanon
Summers, John B., St. Louis
Summers, Joseph S., Jr., Jefferson City
Summers, Thomas F., St. Louis
Sunderman, Raymond C., St. Louis
Sundstrom, Frank D., Springfield
Susman, Noah, Columbia
Sutherland, Gladys P., Bethany
Sutphin, John B., Ferguson
Sutter, Richard A., St. Louis
Swarm, Richard L., Bethesda, Md.
(Member St. Louis Medical Society)
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Sweany, Henry C., Mount Vernon
Sweet, Herbert C., Webster Groves
Sweets, Henry H., Jr., Hannibal
Sweiger, James H., Maysville
Swekosky, Frank J., St. Louis
Swisher, Robert C., Kansas City
Switzer, Clyde, Kansas City
Szabados, Ernest D., Independence
Szymanski, Stanley R., Moberly

T

Tadlock, Baxter W., St. Joseph
Tahir, Mohammad, St. Joseph
Talbott, Hudson, Louisville, Ky.
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Tanaka, George M., St. Louis
Tanner, Robert H., Jefferson City
Tapper, Stephen M., St. Louis
Tarrasch, Ernest L., Springfield
Tarson, Solomon S., Kansas City
Tarver, Quinton, Kennett
Tarvydas, Francis, Edina
Tashma, Sigmund, St. Louis
Tasker, Charles B., Kansas City
Tate, Lloyd L., St. Louis
Taussig, Barrett L., St. Louis
Taylor, Byron H., Jr., Fredericktown
Taylor, Elmer, W., Lockwood
Taylor, Eugene D., St. Louis
Taylor, Eugene T., St. Louis
Taylor, Helen L., St. Louis
Taylor, J. E., Kansas City
Taylor, Leo T., Neosho
Taylor, Leon A., Jefferson City
Taylor, Van W., Bonne Terre
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Teare, Max E., Wichita, Kansas
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Ternberg, Jessie L., St. Louis
Terrill, Robert S., Kansas City
Tess, Melvin J. H., St. Louis
Tesson, James A., Kansas City
Thale, Thomas, St. Louis
Theel, Otto W., Jr., Kansas City
Thiele, Belmont R., St. Louis
Thiele, George H., Kansas City
Thiele, O. K., St. Charles
Thoma, George E., Jr., St. Louis
Thomas, Charles S., St. Louis
Thomas, Christopher Y., Kansas City
Thomas, Forrest, St. Joseph
Thomas, Helen E. Y., Columbia
Thomas, Horace E., Columbia
Thomasson, David D., Springfield
Thomasson, Mary W., University City
Thomasson, Robert A. E., St. Louis
Thompson, Arthur M., St. Louis
Thompson, Charles L., Kansas City
Thompson, Emma A., Columbia
Thompson, F. G., Jr., St. Joseph
Thompson, Ian M., Columbia
Thompson, J. W., St. Louis
Thompson, Lawrence D., St. Louis
Thompson, Ralph L., St. Louis
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Throgmorton, Howard B., Sikeston
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Thurman, Hill C., Parkville
Thym, Henry P., St. Louis
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Tice, Wayne K., Independence
Tichenor, Robert W., Sappington
Tietjen, Frederick O., Jefferson City
Tiffany, D. E., Mountain View
Tillman, Walter W., Jr., Springfield
Timpton, Richard H., St. Louis
Tindall, Robert N., St. Louis
Tinsley, John C., Jr., Columbia
Tippett, Jack C., St. Louis
Titterington, Paul F., St. Louis
Tjoflat, Oliver E., St. Louis
Tobias, Norman, St. Louis
Todd, Thomas B., Nevada
Tomlinson, William L., St. Louis
Tonelli, George L., St. Louis
Tooker, Charles W., St. Louis
Torin, Bernice A., University City
Towers, Orville W., St. Charles
Townsend, James A., Clayton
Townsend, Vincent F., Maplewood
Tracy, Herbert A., Belton
Treiman, Robert C., St. Louis
Tremain, E. E., Maplewood
Tremain, Irl G., St. Louis
Tribble, Robert E., Chaffee
Trigg, Joseph F., St. Louis
Tripodi, Anthony M., Tacoma, Wash.
(Member St. Louis Medical Society)
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Triska, Roland A., St. Louis
Trolinger, James H., Jackson
Trotter, Francis O., Jr., St. Louis
Trowbridge, Barnard C., Kansas City
Trowbridge. Ellsworth H., Prairie
Village, Kansas
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Trowbridge, Ellsworth, Jr., Kansas City
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Trugly, Edith S., St. Louis
Trunko, Leo, Lemay
Tsang, John L. K., Springfield
Tucker, Eugene F., St. Louis
Tureen, Louis L., St. Louis
Turner, Glenn O., Springfield
Turner, James H., Poplar Bluff
Turner, James K., St. Louis
Turner, Percy C., Kansas City
Turner, Rush, St. Louis
Turner, William F., Poplar Bluff
Tuthill, Herbert, Kansas City
Twedell, Donald L., St. Louis
Twin, Edward J., Kansas City
Twyman, Richard A., Kansas City
Tygett, Glenn J., Cape Girardeau
Tyler, Wendell H., St. Charles

U

Uhlemeyer, Henry A., St. Louis
Ulett, George A., St. Louis
Ulett, Pearl C., St. Louis
Underwood, Dick H., Kansas City
Underwood, Harry A., Kansas City
Underwood, Johnson, Jr., Kansas City
Underwood, Millard K., Rolla
Underwood, Ross H., Kansas City
Unger, Harold, Kansas City
Ungvari, Joseph C., St. Louis
Unterberg, Hillel, St. Louis
Upshaw, Paul O., Springfield
Upsher, Albert E., Kansas City
Urban, Edgar D., Sikeston
Utterman, William F., Perryville
Uyeno, Frank S., St. Louis

V

Vacca, Joseph B., San Antonio, Texas
(Member St. Louis Medical Society)
Vail, A. Denton, Springfield
Valach, Frank J., Brentwood
Valentine, Herbert S., Kansas City
Van Biber, James T., Independence
Van Buskirk, Terrance E., Kansas City
Van Buskirk, William C., Kansas City
Van Cleve, John D., Malden
Vandiver, Virgil D., Chillicothe
Vandover, John T., St. Louis
Van Matre, R. M., Washington, D. C.
(Member St. Louis Medical Society)

Vatterott, Paul B., St. Louis
Vaughan, J. Russell, St. Louis
Vaughn, Arthur N., St. Louis
Vaughn, James W., St. Louis
Venable, H. Phillip, St. Louis
Verda, Dominic J., St. Louis
Vermillion, Crofford O., St. Louis
Vescovo, Paul C., Jr., Smithville
Vest, James C., St. Louis
Vezeau, Stephen, St. Louis
Vilmer, Charles, Kansas City
Vincent, Jack C., Kansas City
Vinyard, Jack L., Carrollton
Vinyard, Paul, St. Louis
Virant, John A., St. Louis
Virden, Herbert H., Kansas City
Vitale, Anthony J., St. Louis
Vitale, Nicholas S., St. Louis
Vitt, Alvin E., St. Louis
Vitt, Edwin F., St. Louis
Viviano, Joseph G., St. Louis
Vizgird, Joseph J., St. Louis
Vogel, Eugene A., St. Louis
Vogt, William H., Jr., St. Louis
Vohs, Carl F., St. Louis
Vollmar, Clarence J., Webster Groves
Von Kaenel, Joseph E., St. Louis
von Ravenswaay, Theodore, Columbia
Votaw, Robert E., St. Louis
Voth, Harold W., Kansas City
Vournas, Christopher G., St. Louis

W

Wacker, Leo L., St. Louis
Waddell, Bill D., Smithville
Waddle, Theodore L., Dexter
Wade, Frederick E., Kansas City
Wade, James P., St. Louis
Wadlow, Ernest E., St. Joseph
Wagenbach, William F., St. Louis
Waggoner, Charles M., Columbia
Waggoner, Sharon E., St. Joseph
Wakefield, Franklin, Jr., Kansas City
Wakeman, Jasper N., Springfield
Wald, Stanley M., St. Louis
Walden, James M., Kansas City
Walk, Lloyd F., Belleville, Ill.
(Member St. Louis Medical Society)
Walker, Ambrose T., Mammoth Springs, Ark.
(Member South Central Counties)
Walker, Francis S., St. Louis
Walker, George S., Clinton
Walker, Harvey, Jr., St. Louis
Walker, Hugh B., Clinton
Walker, James C., Kansas City
Walker, John W., Kansas City
Walker, Orville C., Jr., Kansas City
Walker, Paul W., Joplin
Walker, Willard B., Clayton
Walker, William E., LaMonte
Walker, William M., Springfield
Wall, Albert, St. Louis
Wall, Arthur H., Sierra Madre, Calif.
(Member Jackson County)
Wall, Emmett D., St. Louis
Wall, Harry C., Kansas City
Wall, Joe A., Houston
Wall, Leonard A., Kansas City
Wallace, Edgar S., Mexico
Walsh, Theodore E., St. Louis
Walsh, Thomas J., St. Louis
Walsh, William T., Morgantown, W. Va.
(Member Greene County)
Walter, Archie L., Sedalia
Walters, Harold E., St. Louis
Walters, John H., Columbia
Walters, Laura, Columbia
Walters, William H., St. Louis
Walterscheid, John H., Hannibal
Walther, Roy A., Jr., St. Louis
Walton, Franklin E., St. Louis
Walton, Marion C., Mountain View
Waltrip, Roy T., Jr., Sikeston
Ward, Joe, Lexington
Ward, Robert L., Centralia
Ward, Robert L., Kansas City
Warner, George K., St. Louis
Warner, Robert G., St. Louis
Warres, Herbert L., St. Joseph
Washburn, J. Loren, Versailles
Washington, Edward L., Columbia
Wasserman, Helman C., St. Louis
Waterman, Franklin M., Liberty
Waters, Clarence N., St. Louis
Waters, E. Burton, Kirkwood
Waters, Hugh R., St. Louis
Watkins, George L., Jr., Farmington
Watson, Cecil L., Oak Grove
Watson, Ethel, Independence
Wattenberg, Carl A., St. Louis
Watts, Byron E., Jefferson City
Waxman, David, Kansas City
Waxman, Jane Z., Kansas City
Wayland, Thomas A., Camdenton
Webb, Leslie R., Jr., Springfield
Webb, Marion A., St. Louis
Webb, Paul B., St. Louis
Webb, Paul B., Jr., St. Louis
Webb, Paul K., St. Louis
Weber, Eugene P., St. Louis
Weber, Sol, St. Louis
Weber, William K., Clayton
Webster, Joseph G., Kansas City
Webster, Roger W., Hayward, Calif.
(Member Jasper County)
Weed, Randal W., St. Joseph
Weeks, George R., Cape Girardeau
Weger, Carl C., Keytesville
Wegner, Carl R., St. Louis
Weiford, Edward C., Kansas City
Weiler, Thomas J., St. Louis
Weinel, Francis G., St. Louis
Weinhaus, Robert S., St. Louis
Weinsberg, William C., St. Louis
Weintraub, Solomon A., St. Louis
Weir, Don C., St. Louis
Weir, Royal A., St. Louis
Weis, Matthew W., St. Louis
Weisbrod, Wilfred B., St. Louis
Weisman, Renate D., St. Ann
Weisman, Sol, St. Louis
Weiss, James M. A., University City
Weiss, Richard S., St. Louis
Weiss, Robert M., St. Louis
Weitman, Maximilian, St. Louis
Welch, Hooper W., St. Louis
Welker, Joseph E., Kansas City
Well, Julius W., Palmyra
Welsh, Laurence C., St. Louis
Weltscheff, Christo A., Kansas City
Wempe, G. Raymond, Maryville
Wenneker, Alvin S., St. Louis
Wennerman, Sam F., St. Louis
Wentzel, Louis R., St. Louis
Wepprich, Michael S., Washington
Werner, Dean F., N. Kansas City
Werner, Franklin C., N. Kansas City
Werner, William A., St. Louis
Werth, Duncan S., Glendale
West, Joseph W., St. Louis
Westerman, Henry C., University City
Westrup, Arthur W., Webster Groves
Westrup, Ellsworth A., Kirkwood
Wetzel, Fred S., Jr., Carthage
Weyerich, Leon F., St. Louis
Wheeler, Charles B., Kansas City
Wheeler, John H., Kansas City
Whitaker, Topsy H., East Prairie
White, Charles H., Kansas City, Kansas
(Member Jackson County)
White, George A., Kansas City
White, Orville O., St. Louis
White, R. Ned, Springfield
White, Stoughton, F., Kansas City
White, William E., Kansas City
White, William H., St. Louis
White, William H., Jr., Clayton
Whitehead, Frank F., Neosho
Whiteman, John R., Kansas City
Whitener, Paul R., St. Louis
Whitman, Doyle C., Kansas City
Whitmore, J. Stewart, Kansas City
Whitsell, Ora E., St. Joseph
Whitten, Marion F., Carthage
Whittico, James M., St. Louis
Wick, Quintin J., St. Louis
Wicks, Mary R., San Francisco, Calif.
(Member St. Louis Medical Society)
Wiedershine, Leonard J., St. Louis
Wiegand, Herbert C., St. Louis
Wieman, Harry K., Joplin
Wien, Irving A., Kansas City
Wiener, Meyer, Coronado, Calif.
(Member St. Louis Medical Society)
Wiese, Harry W., St. Louis
Wiggins, Roland L., Columbia
Wilbur, David G., Cabool
Wilbur, Ronald E., Address Unknown
Wilcox, Claude V., St. Louis
Wilcoxen, William B., Bowling Green
Wild, Aloysius A., St. Louis
Wiles, Jack N., West Plains
Wilhelm, Warren F., Kansas City
Wilhelmi, Otto J., Webster Groves
Wilkinson, Charles B., Kansas City
Wilkinson, Everett A., Kansas City
Will, Leo A., St. Louis
Williams, Charles S., Malden
Williams, Delon A., Kansas City
Williams, Edward B., Jr., St. Louis
Williams, Frank R., Kansas City
Williams, John M., Liberty
Williams, John W., Oak Grove
Williams, John W., Springfield
Williams, John W., Jr., Springfield
Williams, Joseph C., Jr., Kansas City
Williams, Kirkley R., St. Louis
Williams, Luke E., Kansas City
Williams, Ray D., St. Louis
Williams, Robert A., Kansas City
Williams, Robert S., Mexico
Williams, Roland D., Kansas City
Williams, Starks J., Kansas City
Williams, Vincent T., Kansas City
Williams, W. A., Jr., Cape Girardeau
Williamson, George L., Kansas City
Williamson, Oscar E., St. Louis
Williamson, Walter E., St. Louis
Willis, Norman E., Poplar Bluff
Willits, Lyle G., Kansas City
Willman, Charles R., St. Joseph
Willman, Vallee L., St. Louis
Willoughby, James W., Liberty
Willoughby, Jean B., Kansas City
Willumsen, Henry C., St. Joseph
Wilson, Alice H., Joplin
Wilson, Charles F., Cape Girardeau
Wilson, Clifford C., Kansas City
Wilson, Daniel R., Mount Vernon
Wilson, Fred K., Winston
Wilson, Hester J., Kansas City
Wilson, Hugh M., St. Louis
Wilson, John E., Platte City
Wilson, Keith S., St. Louis
Wilson, Kenneth O., St. Louis
Wilson, Loys C., Kennett
Wilson, Vernon E., Columbia
Wilson, Virgil R., Rosendale
Wilucki, Leo E., St. Louis
Wilucki, Melvin R., St. Louis
Wimber, Thomas C., St. Louis
Wimp, Jesse J., Kirksville
Windhorst, Dorothy B., St. Louis
Windmiller, Myrl E., Columbia
Winer, Herbert J., Kansas City
Winkelman, Esther B., Kansas City
Winn, George W., Boonville
Winokur, George, St. Louis
Winston, Bernard H., Kansas City
Winter, Tyrus D., St. Louis
Winterer, Roland A., St. Louis
Winters, Kathleen, St. Louis
Wippo, Edgar W., St. Louis
Wirthlin, Edward H., St. Louis
Wise, George W., Kansas City
Wise, Gordon F., Springfield
Wissmath, Frank S., Clayton
Wissner, Seth, Clayton
Withers, Orval R., Kansas City
Withrow, John B., N. Kansas City
Witt, Clyde M., St. Louis
Witt, Frederick W., St. Louis
Wittler, Harry A., Brentwood
Wolf, Jack W., Kansas City
Wolff, Paul G., Cape Girardeau
Wolfram, Philip H., Smithville
Woltzen, Samuel, Clinton
Wommack, Fred L., Crane
Wood, Bennett R., St. Louis
Wood, George F., Fulton
Wood, George H., Carthage
Wood, James A., Clayton
Wood, William W., Springfield
Woodruff, Frederick E., St. Louis
Woods, Harold V., Independence
Woods, Walton C., Parkville
Woodward, William W., Independence
Wooldridge, Bart F., Joplin
Wooldridge, W. E., Springfield
Woolf, Ralph B., St. Louis
Workman, George M., Hermann
Worley, Charles A., Sweet Springs
Wortmann, Robert F., Kansas City
Wotawa, William J., St. Louis
Wray, Rolla B., Nevada
Wright, George W., Webb City
Wright, Robert P., Kansas City
Wu, William Q., Kansas City
Wulff, George J. L., Jr., St. Louis
Wyatt, Lois C., Kirkwood

Y

Yaeger, Gerald A., St. Louis
Yancy, Daniel L., Springfield
Yanow, Mitchell, Clayton
Yates, J. Lewis, Mount Vernon
Yohe, Ruth M., Kansas City
Yore, Richard W., St. Louis
York, William B., Sarcoxie
Yoskit, Harry, Festus

Yost, Walter B., St. Louis
Young, Calvin C., Jr., Joplin
Young, James E., Kansas City
Young, Jesse W., Kansas City, Kansas
(Member Jackson County)
Young, John S., St. Louis
Young, Leo P., St. Louis
Young, Robert B., Rolla
Young, Robert H., Moberly
Younge, Walter A., St. Louis
Younger, Anita, St. Louis
Younger, Ernest, St. Louis
Yuan, Louis S. K., St. Louis

Z

Zacharias, David L., Kansas City
Zahorsky, John, Steelville
Zahorsky, Theodore S., St. Louis
Zahrt, Frank H., Princeton
Zeffren, Joel L., Bronx, N. Y.
(Member St. Louis Medical Society)
Zeinert, Oliver B., University City
Zeitler, Walter A., Jennings
Zeitler, William T., St. Louis
Zellermayer, Jacob, Kansas City
Zentay, Paul J., St. Louis
Ziegelmeyer, John S., St. Louis
Ziegler, Allen M., Kansas City
Ziegler, Dewey K., Kansas City
Zillgitt, George H., St. Louis
Zimmerman, Herbert B., Olivette
Zimmerman, Joseph A., Kennett
Zimmermann, Carl A. W., Cape Girardeau
Zingale, Frank G., St. Louis
Zink, Oscar C., St. Louis
Zoglin, Nathan, Kansas City
Zuber, Harold V., Kansas City
Zuckner, Jack, St. Louis
Zwart, Claude H., St. Louis
Zwirn, H. B., Florissant

List of Members by County Societies

ADAIR COUNTY
(North Central Counties Medical Society)

ANDREW COUNTY MEDICAL SOCIETY

Baker, Warren C., Savannah
Holliday, Morgan L., Fillmore
Kelley, Gilbert B., Savannah
Kelley, Ralph R., Savannah
Long, Forrest C., Savannah
Wilson, Virgil R., Rosendale

ATCHISON COUNTY
(Nodaway-Holt-Atchison-Gentry-Worth Counties Medical Society)

AUDRAIN COUNTY MEDICAL SOCIETY

Bland, Warren W., Vandalia
Coil, Paul E., Mexico
Davis, Leonard L., Jr., Mexico
Dwyer, Thomas L., Mexico
Ector, Henry J., Mexico
Epple, Kathryn C., Mexico
Epple, Lawrence K., Mexico
Gantt, Ernest S., Jr., Mexico
Garcia, Charles L., Mexico
Jolly, Benjamin N., Mexico
Jolly, William H., Mexico
Kallenbach, G. P., Mexico
Lankford, Harold D., Mexico
O'Brien, Harry F., Mexico
Rodes, Ned D., Mexico
Rouse, David M., Mexico
Wallace, Edgar S., Mexico
Williams, Robert S., Mexico

BARRY COUNTY
(Ozarks Medical Society)

BARTON-DADE COUNTY MEDICAL SOCIETY

Arnold, Herbert M., Lamar
Bickel, Vern T., Lamar
Cain, Alvin R., Lamar
Carroll, Thomas W., Lamar
Cowan, Watt O., Greenfield
Guldner, Edmond, Lamar
McNeel, Lee A., Jr., Greenfield
Taylor, Elmer W., Lockwood

BATES COUNTY
(West Central Missouri Medical Society)

BENTON COUNTY MEDICAL SOCIETY

Logan, James A., Warsaw

BOLLINGER COUNTY
(Unorganized)

BOONE COUNTY MEDICAL SOCIETY
(Columbia)

Allen, Horace E., Professional Bldg.
Allen, Joseph E., Professional Bldg.
Almond, Carl H., 807 Stadium Rd.
Anast, Constantine S., 308 Thilly Ave.
Baker, James M., 16 S. 10th St.
Battersby, Richard S., 203 Westwood Ave.
Bivings, F. Gary, 36 Maplewood Dr.
Black, Samuel P., 300 S. Glenwood St.
Brooke, Clement E., 501 Edgewood Ave.
Brukardt, Diane, Student Health Service
Bruner, Claude R., Professional Bldg.
Buesseler, John A., Medical Center
Bumgarner, James E., 909 University Ave.
Bumgarner, Roger W., 1723 Amelia St.
Burns, Thomas W., 106 Westwood Ave.
Chalkley, Judson I., Boone County Hospital
Chiasson, E. Chaille, Guitar Bldg.
Cooper, Maurice E., 1000 Wayne Rd.
Cope, James C., Professional Bldg.
Darnell, Thomas F. B., 909 University Ave.
Denninghoff, James C., 202 S. Tenth St.
Dietrich, Karl D., Professional Bldg.
Evans, Alden M., Ellis Fischel State Cancer Hospital
Flynn, Joseph E., Medical Center
Freeman, Robert F., 1621 E. Broadway
Fuchs, George J., Jr., 1026 Hickory Hill Dr.
Galeota, Wm. R., Student Health Service
Garrett, Glen H., Professional Bldg.
Gaunt, William D., Medical Center
Gordon, James S., 807 Stadium Rd.
Grayson, Richard R., Stephens Bldg.
Hall, David G., 807 Stadium Rd.
Hardwicke, Henry M., Division of Health, Jefferson City
Haugen, Harold, Medical Center
Hepner, Walter R., Jr., 208 Midhurst Rd., Baltimore, Md.
Holmes, John L., Medical Center
Jackson, Robert L., Medical Center
Jamison, Robert M., Medical Center
Johnson, Richard E., Ellis Fischel State Cancer Hospital
Keats, Theodore E., 624 Lakeshore Dr.
Keown, Kenneth, K., Medical Center
Lachance, Leopold, Centralia
Ladenson, Roland P., 16 S. Tenth St.
Lamke, Charles M., Professional Bldg.
Landor, John H., 807 Stadium Rd.
Leech, Charles A., Guitar Bldg.
Lewis, Ray B., 2012 Valley View Dr.
Lodwick, Gwilym S., 40 Redgeley Rd.
Logue, John, 516 Crestland Dr.
Lowney, John F., Student Health Service
McElroy, Glenn L., 909 University Ave.
Martt, Jack M., University Hospitals
Miller, Leroy J., Guitar Bldg.
Modlin, John J., 310 Thilly Ave.
Moranville, Benedict A., Student Health Service
Neal, M. Pinson, Medical Center
Overholser, Milton D., Medical Center
Payne, John W., Professional Bldg.
Perna, Vincent P., Medical Science Bldg.
Pickard, Clarence M., 3 West Blvd., North
Pingelton, Wm. B., 1006 Cherry St.
Porterfield, John F., Medical Center
Ransdell, James F., 25056 Solo Rd., Hayward, Calif.
Ray, C. Thorpe, Medical Center
Roden, J. S., 1620 Bass Ave.
Rodgers, Elrie P., Box 157
Sala, Jose M., Ellis Fischel State Cancer Hospital
Scheuber, Charles, 237 Long Rd., San Antonio, Tex.
Schewe, Elmer J., Jr., 55 Sunset Dr.
Schultz, Loraine E., Boone County Hospital
See, William B., Professional Bldg.
Sheppard, Lee C., Jr., Medical Center
Sights, Warren P., Jr., 807 Stadium Rd.
Simpson, Lloyd, 411 Stewart Rd.
Smith, Grafton A., 1019 Hickory Hill Dr.
Smith, Jason N., Jr., 701 West Blvd., S.
Smith, Joe R., Professional Bldg.
Spurgeon, Milo J., 211 Brenda Lane
Stephenson, Hugh E., Jr., Medical Center
Stewart, William J., 909 University Ave.
Stine, Dan G., 1215 Francis Dr.
Stockdale, John C., Houston
Suggett, Finis C., 805 Broadway
Thomas, Helen E. Y., 503 Russell Lane
Thomas, Horace E., 909 University Ave.
Thompson, Ian M., Medical Center
Tinsley, John C., Jr., 16 S. Tenth St.
VonRavenswaay, Theodore, 2005 Parkade Ave.
Waggoner, Charles M., Professional Bldg.
Walters, John H., Guitar Bldg.
Walters, Laura, Guitar Bldg.
Ward, Robert L., Centralia
Washington, Edward L., 1504 E. Broadway
Wiggins, Roland L., 201 N. Third St.
Wilson, Vernon E., Medical Center
Windmiller, Myrl E., Guitar Bldg.

BUCHANAN COUNTY MEDICAL SOCIETY
(St. Joseph)

Allain, James J., 902 Edmond St.
Allaman, John M., 439 Acacia Dr. Sarasota, Fla.
Ames, William H., 902 Edmond St.
Augustine, Robert W., 902 Edmond St.
Bascom, Charles H., State Hospital No. 2
Beck, Leroi, 1618 N. Third St.
Beck, Paul M., Kirkpatrick Bldg.
Benson, Scott C., 324 N. 6th St.
Berney, Francis J., 1402 Faraon St.
Boteler, George M., Howitt Bldg.
Bristow, Robert B., Physicians & Surgeons Bldg.
Butler, E. F., 902 Edmond St.
Carpenter, George T., 902 Edmond St.
Chiarottino, Joseph F., Doctor's Bldg.
Christ, Martin H., 6106 King Hill Ave.
Craig, Owen W. D., Tootle Bldg.
Day, Maxwell, Schneider Bldg.
DuMont, Clement C., 1905 Francis St.
Ferguson, Luther J., 723½ Felix St.
Fisher, Joseph L., 7th & Jule Sts.
Forgrave, John R., 420 N. 8th St.
Forgrave, Leon P., 420 N. 8th St.
Forman, George W., P.O. Box 747
Fuson, Levi H., Kirkpatrick Bldg.
Grant, Claude S., Doctor's Bldg.
Greenberg, Charles, Address Unknown
Grimes, M. E., Kirkpatrick Bldg.
Handler, Eric, Physicians & Surgeons Bldg.
Harner, Casper G., 902 Edmond St.
Herman, Allen I., Physicians & Surgeons Bldg.
Howden, Thomas L., Kirkpatrick Bldg.
Hughes, Judson M., Kirkpatrick Bldg.
Hunt, William J., 2600 Pacific St.
Ide, Lucien W., P.O. Box 747
Kieber, Robert W., Kirkpatrick Bldg.
Knepper, P. A., Box 747
Kulowski, Jacob, 1402 Faraon St.
Lau, Gustav A., Kirkpatrick Bldg.
Lee, Carleton H., 2403 Frederick Ave.
Lockhart, William G., 902 Edmond St.
McDaniel, John R., 902 Edmond St.
McDonald, Wilbur P., 301 N. 8th St.
McGlothlan, Arthur B., 821 N. 24th St.
Magnin, Richard L., Physicians & Surgeons Bldg.
Martin, John N., Physicians & Surgeons Bldg.
Meluney, S. E., Kirkpatrick Bldg.
Minton, Robert S., Corby Bldg.
Moen, Berwyn H., 902 Edmond St.
Morse, Marvin, 2702 Faraon St.
Mothershead, John L., 2603 Frederick Ave.
Muench, Albert H., Physicians & Surgeons Bldg.
Mundy, Homer F., 2801 Sacramento St.
Nelson, Fred L., 902 Edmond St.
Ness, Carl K., 902 Edmond St.
O'Connor, William B., Kirkpatrick Bldg.
Petersen, H. E., 2401 Frederick Ave.
Pettit, Manson B., 3400 Frederick Ave.
Pfeffer, Robert I., 1915 N. 29th St.
Pifer, Lawrence H., 1302 Faraon St.
Potter, Caryl A., Jr., Physicians & Surgeons Bldg.
Potter, Thompson E., 731 Faraon St.
Redmond, William, Corby Bldg.
Riddell, Richard V., 902 Edmond St.
Rogers, John T., 2502 Ashland Ave.
Rosenthal, Irwin I., 2715 Union Ave.
Rost, William B., 2221 N.W. Extension Blvd.
Roundy, Collis I., Kirkpartick Bldg.
Ryan, John H., 301 N. 8th St.
Senne, Herbert C., Physicians & Surgeons Bldg.
Senor, Samuel Earl, 722½ Francis St.
Shevlin, Charles F., 902 Edmond St.
Simmons, Benjamin B., Herman Bldg.
Smith, Clifton, 2821 Ashland Ave.
Stacy, Winton T., 900 Ashland Court
Stallard, Donald J., 902 Edmond St.
Tadlock, Baxter W., 2727 Jule St.
Tahir, Mohammed, Box 66, Wyatt Park
Teare, Max E., 5814 Rockwood Dr., Wichita, Kans.
Thomas, Forrest, State Hospital 2
Thompson F. Gregg, Jr., P.O. Box 830
Wadlow, Ernest E., Kirkpatrick Bldg.
Waggoner, Sharon E., 301 Illinois Ave.
Warres, Herbert L., 902 Edmond St.
Weed, Randal W., 702 Jule St.
Whitsell, Ora Earl, 824 Edmond St.
Willman, Charles R., Kirkpatrick Bldg.
Willumsen, Henry C., 902 Edmond St.

BUTLER-RIPLEY-WAYNE COUNTY MEDICAL SOCIETY
(Poplar Bluff)

Barbour, Marvin R., Kneibert Clinic
Biggs, Fred J., Jr., Kneibert Clinic
Boone, Richard, Doniphan
Brandon, Walter L., P.O. Box 407
Brookreson, Alton F., 321 Oak St.
Canlas, Emilio M., 705 Pine Blvd.
Clay, Hampson S., 218 N. Broadway

Cline, Edward W., Butler County Health Center
Cline, Harold H., Piedmont
Dinelli, Frank E., 215 Oak St.
Engelhardt, Robert C., Kneibert Clinic
Gernstetter, Sangwill L., P.O. Box 473
Hansbrough, Eugene T., 623 Pine Blvd.
Harwell, James L., 203 S. Main St.
Harwell, J. Lester, 1311 N. Main St.
Henrickson, Hardin M., 215 Oak St.
Henrickson, Hardin O., 215 Oak St.
Johnson, Frank C., Doniphan
Kneibert, Fred L., Kneibert Clinic
Loughead, John R., West Maude St.
McLain, B. M., 724 Cynthia Dr.
McPheeters, James W., Sr., 330 N. 2nd St.
McPheeters, J. W., Jr., 330 N. 2nd St.
Macauley, Bernard J., 215 Oak St.
Malinoski, Mitchell, V., Veterans Hospital
Markel, Arthur D., Kneibert Clinic
May, Albert Louis, Jr., 330 N. 2nd St.
Miller, David V., Kneibert Clinic
Parker, Arthur C., Jr., Kneibert Clinic
Post, Cyril A., 123 S. Broadway
Ruff, T. Eugene, Kneibert Clinic
Turner, James H., 217 Oak St.
Turner, William F., 217 Oak St.
Willis, Norman E., 218 N. Broadway

CALDWELL COUNTY
(Grand River Medical Society)

CALLAWAY COUNTY MEDICAL SOCIETY
(Fulton)

Baur, Alfred K., State Hospital 1
Brown, John J., 101 E. 6th St.
Cremer, William J., State Hospital 1
Crews, Robert N., 612 Court St.
Durst, Henry, 610 Court St.
Freund, H. G., State Hospital 1
Gish, Rutledge, 5 E. 5th St.
Groce, George, 607 Court St.
Hall, Robert G., 4406 McPherson Ave., St. Louis
Hill, James E., 607 Court St.
Hunter, James R., Webster Groves
Jackson, Vernon B., 407 Court St.
Kepler, Earl C., State Hospital 1
Leonhardt, Erwin M., 3946a Jamieson St., St. Louis
Nichols, Frank J., State Hospital 1
Price, Robert P., State Hospital 2, St. Joseph
Ritterbusch, James K., State Hospital 1
Rusk, Earl M., New Bloomfield
Wood, George F., 614 Market St.

CAMDEN COUNTY

CAPE GIRARDEAU COUNTY MEDICAL SOCIETY
(Cape Girardeau)

Ashley, Hugh V., 234 N. Sprigg St.
Ashley, Hugh, Jr., 234 N. Sprigg St.
Bahn, Charles F., 1902 West Broadway
Barnes, Seth S., 1854 Broadway
Campbell, Edwin D., 937 Broadway
Chapman, Jean A., 1902 Broadway
Cochran, Jo R., 234 N. Sprigg St.
Crites, Edward, Sedgewickville
Crowe, John T., 937 Broadway
Drace, James J., 903 Bellevue
Elrod, Dennis B., 1912 Broadway
Estes, Albert M., 714 Broadway
Ford, Walter W., Gordonville
Hall, Frank W., 1912 Broadway
Herbert, Charles T., 824 Good Hope St.
Hoxworth, Gerald M., 24 N. Sprigg St.
Jaeger, Joseph N., Jackson
Johnson, Earl W., 937 Broadway
Juden, Alexander G., 4 S. Spanish St.
Kasten, Melvin C., 1453 Themis St.
Keim, John H., 230 N. Sprigg St.
Kinder, James A., 937 Broadway
Kratz, Paul E., 1912 Broadway
Lovinggood, Thomas A., 649 Sylvan Lane
McDonald, Eugene F., Jackson
McGinty, Charles P., 1912 Broadway
Nunnelly, Gordon M., 1924 Broadway
Nussbaum, Paul B., 1758 Broadway
Oehler, William F., 234 N. Middle St.
Otto, Thomas G., 1912 Broadway
Rapp, Harold B., 1011 N. Henderson St.
Rawlins, Fred E., 1607 Berthing St.
Reynolds, Garland A., 826 Themis St.
Ridings, Harold D., 937 Broadway
Ritter, Raymond A., 1912 Broadway
Seabaugh, Dayton I. L., Jackson
Seabaugh, D. Rusby, 219 N. Pacific St.
Seabaugh, L. R., 219 N. Pacific St.
Seabaugh, Oda L., 24 N. Sprigg St.
Seabaugh, William O. L., 24 N. Sprigg St.
Shoss, Milton, Medical Arts Bldg.
Trolinger, J. H., Jackson
Tygett, Glenn J., 215 N. Sprigg St.
Williams, W. A., Jr., 24 N. Sprigg St.
Wilson, Charles F., 714 Broadway
Wolff, Paul G., 1819 Broadway
Zimmermann, Carl A. W., Oakenwold

CARROLL COUNTY
(Grand River Medical Society)

CARTER-SHANNON COUNTY MEDICAL SOCIETY

Rollins, H. D., Winona

CASS COUNTY
(West Central Missouri Medical Society)

CEDAR COUNTY
(West Central Missouri Medical Society)

CHARITON-MACON-MONROE-RANDOLPH COUNTY MEDICAL SOCIETY

Arnold, Eugene L., Moberly
Baker, Josephine D., Moberly
Barnett, Floyd A., Paris
Campbell, James Edwin, Macon
Chute, W. Deward, Moberly
Cohrs, Clarence C., Moberly
Collins, Gretchen D., Macon
Dreyer, Philip V., Huntsville
Eggleston, Donald E., Macon
Fellows, William W., 400 S.W. 25th Ave., Miami, Fla.
Fleming, Jacob W., Jr., Moberly
Fleming, Thomas S., Moberly
Harms, Florian L., Salisbury
Hasson, Robert, Moberly
Hawkins, George W., Salisbury
Huber, Lasley E., Moberly
Johnson, Edward M., U. S. Army Hospital, Ft. Campbell, Ky.
McMurtry, Leonard K., Moberly
Miller, D. Herbert, Veterans Hospital, Montgomery, Ala.
Miller, Howard S., Macon
Musson, E. K., Macon
Pemberton, Charles W., Mendon
Ragsdale, George M., Paris
Rice, Grover C., Brunswick
Rinker, Carl T., Jr., Macon
Rowlette, Avery P., Moberly
Smith, Carl C., Moberly
Streator, Roderick D., 1332 Blackstone Ave., St. Louis
Stuart, Daniel D., Brunswick
Szymanski, Stanley R., Moberly
Weger, Carl C., Keytesville
Young, Robert H., Moberly

CHRISTIAN COUNTY
(Ozarks Medical Society)

CLARK COUNTY
(Lewis-Clark-Scotland County Medical Society)

CLAY COUNTY MEDICAL SOCIETY

Aks, Daniel, Mt. Sinai Hospital, Cleveland, Ohio
Allen, S. Lloyd, Parkville
Baird, J. Edward, Excelsior Springs
Bates, George C., 2730 South Mall, Kansas City
Boone, Daniel S., 3329 Mohawk Lane, Kansas City
Bowles, Richard P., 112 N. Water St., Liberty
Bruce, Paul C., 152 Hi-Way, Liberty
Chastain, Maurice W., 2016 Swift Ave., N. Kansas City
Chiles, David R., Smithville
Cox, William L., 101 W. Kansas St., Liberty
Dunham, R. H., 2025 Swift Ave., N. Kansas City
Dwyer, Reinhardt D., 1806 Swift Ave., N. Kansas City
Edwards, Theodore F., 329 Armour Blvd., N. Kansas City
Fischer, Edward H., 306 E. 21st Ave., N. Kansas City
Fowler, I. Charles, 2025 Swift Ave., N. Kansas City
Gauer, Robert J., 4916 N. Sherwood Dr., Kansas City
Gay, Elmer E., Richmond
Goodson, William H., Liberty
Gullett, Charles C., 10 Richards Rd., Kansas City
Hayes, Lawrence L., 1508 East 51st St., Kansas City
Hendren, Glenn W., Liberty
Hobbs, Earl B., Smithville
Hodge, Robert H., 329 Armour Rd., N. Kansas City
Houck, Russell M., V. A. Hospital, Kecoughtan, Va.
Knox, Earl R., Rialto Bldg., Kansas City
Kovac, Albert P., Argyle Bldg., Kansas City
Kuenzi, Donald E., 8400 N. Oak St. Trwy., N. Kansas City.
Langhus, Melvin O., Route 4, N. Kansas City
Love, Drury M., 613 E. 66th St., Kansas City
McCormick, James E., 4030 N. Oak St., Kansas City
McCracken, Samuel R., 107 W. Spring St., Excelsior Springs
Mullins, Bernard L., 1806 Swift Ave., N. Kansas City
Musgrave, David E., Excelsior Springs
Nicholson, Ralph L., 116 South St., Excelsior Springs
Parker, Robert H., 2005 Fayette St., N. Kansas City
Pate, O. S., Pioneer Bldg., N. Kansas City
Petersen, Eugene G., 6708 N. Oak St. Trfwy., Kansas City
Pileggi, Felix A., R. 4, Brady Hills, N. Kansas City
Porter, Russell C., 831 N. Camino Miramonte, Tucson, Ariz.
Revare, Paul, 2025 Swift Ave., N. Kansas City
Roberts, Lacy M., General Hospital 1, Kansas City
Robichaux, Eugene B., 116 South St., Excelsior Springs
Robichaux, Eugene C., Excelsior Springs
Sanders, George E., 116 South St., Excelsior Springs
Sawyer, Floyd E., 329 Armour Rd., N. Kansas City
Schertz, Truman B., 2007 Fayette St., N. Kansas City
Schroeder, Sidney O., Liberty
Spelman, Archibald E., Smithville
Sportsman, Weldon L., 6309 N. Grand Ave., Kansas City
Vescovo, Paul C., Smithville
Vinyard, Jack L., R. 5, Carrollton
Waddell, Bill D., Smithville
Waterman, F. M., Liberty
Werner, Dean F., 2025 Swift Ave., N Kansas City
Werner, Franklin C., 1906 Erie St., N. Kansas City
Williams, John M., 32 South Main St., Liberty
Willoughby, James W., 114 N. Water St., Liberty
Withrow, John B., 2025 Swift Ave., N. Kansas City
Wolfram, Philip H., Smithville
Zacharias, David L., 6708 N. Oak St., Kansas City

CLINTON COUNTY MEDICAL SOCIETY

Kimes, Ira D., Cameron
Luckenbill, Paul T., Plattsburg
Mabrey, John P., Plattsburg
Netherton, George F., Cameron
Spalding, Wilber B., Plattsburg
Wilbur, Ronald E. (Address Unknown)

COLE COUNTY MEDICAL SOCIETY
(Jefferson City)

Belden, Edgar A., State Office Bldg.
Belinson, Louis, State Office Bldg.
Bowe, Edwin E., 401 N. Ridgway St.
Bruce, James G., Central Missouri Trust Bldg.
Cassel, William J., Jr., State Office Bldg.
Clark, Kendall A., 515 East High St.
Cox, William A., 125 E. High St.
Dorris, Richard P., Trust Bldg.
Duval, Addison M., Division of Mental Health
Enloe, Lawrence D., Trust Bldg.
Exon, C. Stuart, 515 E. High St.
Garner, Lynn M., State Division of Health
Guhleman, Henry V., Jr., Medical Arts Bldg.

Gurnee, Landon H., 515 E. High St.
Handler, Fred P., 95 E. Circle Dr.
Kanagowa, Hajime H., Medical Arts Bldg.
Kelly, Marshall W., 507 E. High St.
Klebba, Larry B., P.O. Box 403
Leslie, J. Paul, 929 Fairmount Blvd.
Leslie, J. T., 933 Fairmount Blvd.
Loyd, Earl L., 515 E. High St.
Loyd, Herlan O., 515 E. High St.
McHaney, John W., 606 E. High St.
McKnelly, William V., 507 E. High St.
Mansur, Edward E., 2012 N.W. 13th St., Miami, Fla.
Matthews, John I., 302 Bolivar St.
Maxey, Hugh W., Box 236
Meier, Francis X., 1913 Haysilton Dr.
Meinershagen, Charles W., 138 Forest Pl.
Ossman, Julian A., 2030 W. Main St.
Richardson, R. G., 421 Lafayette St.
Sennott, John S., 515 E. High St.
Shull, George D., 521 E. High St.
Stauffer, Harry B., Central Trust Bldg.
Stephan, August P., 98 W. Circle Dr.
Stricker, Harold C., 515 E. High St.
Sugarbaker, Everett D., 503 E. High St.
Summers, Joseph S., Jr., 515 E. High St.
Tanner, Robert H., 1608 Greenberry Rd.
Taylor, Leon A., 129 E. High St.
Tietjen, Frederick O., 213 Jackson St.
Watts, Byron E., 515 E. High St.
Wayland, Thomas A., Box 239, Camdenton

COOPER COUNTY MEDICAL SOCIETY
(Boonville)

Abele, William A., 329 Main St.
Avery, Willard B.
Beckett, Theodore C., 317½ Main St.
Boley, James O., 3200 E. Meyer Blvd., Kansas City
Chamberlain, Gilbert L., 315 Center Ave.
Diekroeger, Manuel L., R.D. 1
Friedrichs, Vernon D., Pilot Grove
Hata, Daikichi, 329 Main St.
Humphreys, Edward T., 329 Main St.
Sandy, Charles, 4209 W. 70th St., Prairie Village, Kans.
Stuart, Byron M., 329 Main St.
Winn, George W., 329 Main St.

CRAWFORD COUNTY
(Mid-Missouri County Medical Society)

DADE COUNTY
(Barton-Dade County Medical Society)

DALLAS-HICKORY-POLK COUNTY MEDICAL SOCIETY

Barnett, C. H., Bolivar
Brooks, John M., 840 S. Pickwick St., Springfield
Griffin, Mary E. P., Buffalo
Griffin, Olin A., Jr., Buffalo
Harrell, Henry J., Morrisville
McCraw, Doyle C., Bolivar
Robinson, George G., Humansville

DAVIESS COUNTY
(Grand River Medical Society)

DEKALB COUNTY
(Grand River Medical Society)

DENT COUNTY
(Mid-Missouri County Medical Society)

DOUGLAS COUNTY
(South Central Counties Medical Society)

DUNKLIN COUNTY MEDICAL SOCIETY

Baldwin, Paul, Kennett
Beal, Homer, Malden
Benson, Leo J., Jr., Kennett
Croom, Dorwyn W., Malden
Dempsey, D. T., Kennett
Dunmire, George Q., Kennett
Edmondson, Charles T., 138 E. Emma St., Springdale, Ark.
English, Wallace D., Cardwell
Fuzzell, Jameso, Kennett
Green, Robert S., Kennett
Hopkins, F. G., Gideon
Merryman, Charles H., Senath
Miltenberger, Paul C., Kennett
Morehead, William E., Kennett
Palenske, Robert L., Hornersville
Peck, Chester R., Jr., Kennett
Rutledge, William J., Campbell
Spence, Elbert L., Kennett
Tarver, Quinton, Kennett
Van Cleve, John D., Malden
Williams, Charles S., Malden
Wilson, Loys C., Kennett
Zimmerman, Joseph A., Kennett

FRANKLIN-GASCONADE-WARREN COUNTY MEDICAL SOCIETY

Bozzo, Raymond J., Washington
Brenner, Paul A., Owensville
Crawford, Robert M., Sullivan
de la Torre, John J., Sullivan
Denny, Hubert M., Union
Eisenmann, Benjamin P., New Haven
Eyermann, H. Walter, Warrenton
Hoelscher, Harold F., Warrenton
Johnson, Grover C., Marthasville
Mays, Frank G., Washington
Muench, Ludwig O., Washington
Pearl, John F., St. Clair
Post, J. P., Washington
Richardson, George A., Union
Richardson, William R., Union
Royse, Roy P., Sullivan
Ryan, John B., Washington
Schmidt, Charles A., Gerald
Schmidt, Herbert H., Washington
Shaw, Carvel T., Hermann
Steinbeck, Herbert D., Union
Strehlman, Benjamin G., Union
Wepprich, Michael S., Washington
Workman, George M., Hermann

GASCONADE COUNTY
(Franklin-Gasconade-Warren County Medical Society)

GENTRY COUNTY
(Nodaway-Holt-Atchison-Gentry-Worth County Medical Society)

GRAND RIVER MEDICAL SOCIETY
(Caldwell-Carroll-Livingston-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb Counties)

Allen, Erroll W., Carrollton
Bales, Eugene L., Carrollton
Bohnsack, Ralph W., Brookfield
Booth, Herbert R., Hamilton
Breid, Jacob, Trenton
Brennan, Raymond J., Chillicothe
Brewer, Lake, Ridgeway
Brownfield, Samuel T., Brookfield
Broyles, Watkins A., Bethany
Carpenter, George W., Chillicothe
Carter, Howard, Hamilton
Clark, Chester L., Trenton
Conrad, Joseph, Chillicothe
Cullers, Charles H., Trenton
Daley, Frank R., Hamilton
Dixon, John R., Brookfield
Dowell, Donald M., Chillicothe
Dowell, Horace S., Chillicothe
Duffy, Oliver F., Trenton
Ellsworth, Willard, Cainsville
Fair, William L., Chillicothe
Fuson, William A., Trenton
Gale, Joseph F., Chillicothe
Gary, George, Marceline
Gearhart, M., Bethany
Grace, Charles M., Coast Guard Receiving Station, Cape May, New Jersey
Haskell, Ralph E., Norborne
Howell, B. D., Brookfield
Johnson, Glenn D., Maysville
Kimberlin, Herbert C., Trenton
LaSalle, Michael W., 1601 E. 47th Terrace, Kansas City
Lucas, John H., Brookfield
McArtor, Thomas R., Browning
Magill, Joseph R., Milan
Mairs, Edgar J., Trenton
Mandler, George, Chillicothe
Nibbe, Albert F., Bethany
Nixon, Edward E., Gallatin
Perry, John M., Princeton
Platz, John H., Carrollton
Smith, Robert W., Marceline
Staton, R. Hamilton, Carrollton
Sutherland, Gladys P., Bethany
Sweiger, James H., Maysville
Thompson, Emma A. B., Dumas Apartments, Columbia
Wilson, Fred K., Winston
Vandiver, Virgil D., Chillicothe
Zahrt, Frank H., Princeton

GREENE COUNTY MEDICAL SOCIETY
(Springfield)

Allen, Jerry H., 1211 S. Glenstone St.
Amos, James R., 1745 S. National St.
Anthony, Dallas, Professional Bldg.
Ashley, Thomas E., 1211 S. Glenstone St.
Atkinson, Thomas E., Jr., 609 E. Cherry St.
Auner, Cecil R., Professional Bldg.
Barber, John J., Walnut Grove
Bonebrake, M. D., Professional Bldg.
Box, Ernest M., 412 E. Commercial St.
Brown, Alex L., 1636 S. Glenstone St.
Brown, James T., 1653 S. National St.
Brown, Lyman D., 311½ College St.
Burkey, Jordan W., Professional Bldg.
Busiek, Paul J., Professional Bldg.
Busiek, Urban J., Professional Bldg.
Callaway, Guy D., 1155 S. Delaware St.
Callaway, Guy D., Jr., 1211 S. Glenstone St.
Clarke, Michael J., 1636 S. Glenstone St.
Clary, William F., 1636 S. Glenstone St.
Clawson, James W., Professional Bldg.
Clayton, Edgar L., Professional Bldg.
Cochran, Thomas E., Jr., 2423 Brentwood Blvd.
Coller, Frederick C., 2433 Morlan St.
Conrad, Raymond C., 609 Cherry St.
Crawford, Oral B., Professional Bldg.
Cunningham, Darral D., 1715 Boonville Ave.
Delzell, William A., McDaniel Bldg.
Dietz, M. Wendell, Burge Hospital
Dillard, Erin M., Professional Bldg.
Dills, Joseph N., 1715 Boonville Ave.
Dimond, Edgar A., Veterans Adm. Hospital, McKinney, Tex.
Duncan, Robert D., Professional Bldg.
Elkins, Ronald F., Professional Bldg.
Ellis, Francis J., Professional Bldg.
Evans, Ezra L., Jr., Professional Bldg.
Farthing, Fred R., 1234 E. Walnut St.
Farthing, Gene W., Medical Arts Bldg.
Feller, C. E., 1523 N. Jefferson St.
Ferguson, John P., Jr., 1219 S. Clay St.
Ferrell, Thomas E., Jr., Professional Bldg.
Fessenden, Ersel M., 634 Kingsbury Ave.
Fitch, C. H. Max, 1711 Boonville Ave.
Focht, Ralph H., Strafford
Francis, William C., Medical Arts Bldg.
Freeman, Hal E., 609 Cherry St.
Gentry, Merritt L., 1933 Saratoga St.
German, Walter A., Jr., 1211 S. Glenstone St.
Gilpin, Doris C., 1340 E. Meadowmere
Glenn, Elmer E., Professional Bldg.
Glynn, Robert R., 1211 S. Glenstone St.
Gorelick, David F., Professional Bldg.
Gose, Don F., Professional Bldg.
Hahn, Andrew L., Professional Bldg.
Hall, David W., 2122 Wayland Dr.
Hall, Durward G., 1211 S. Glenstone St.
Hanan, Ernest B., 675 S. Kickapoo St.
Hanss, Armand W., Medical Arts Bldg.
H'Doubler, Francis T., Professional Bldg.
H'Doubler, Francis T., Jr., Professional Bldg.
Hogeboom, George W., Professional Bldg.
Hoover, H. Lee, Jr., 1330 E. Walnut St.
Horst, Otto C., Medical Arts Bldg.
Horton, James D., Professional Bldg.
Ivy, Henry B., Holland Bldg.
Jameson, James E., Professional Bldg.
Johnson, George L., Tripler Army Hospital, Box 71, APO 438, San Francisco, Calif.
Johnson, Warford B., Professional Bldg.
Johnson, William F., Professional Bldg.
Johnston, Joseph L., 1855 S. Jefferson St.
Key, James S., Professional Bldg.
Klingner, George M., 2003 Sunshine St.
Knabb, Arthur D., 1630 N. Jefferson St.
Knabb, Harris, 1630 N. Jefferson St.
Knabb, Henry F., 5879 S.W. 60th St., Coral Gables, Fla.
Knabb, Henry F., Jr., 1630 N. Jefferson St.
Knabb, Kenneth E., 1630 N. Jefferson St.
Kolze, Vernon W., 600 S. Glenstone St.
Langston, Walter R., Professional Bldg.
Leidinger, Karl J., Republic
Lemmon, George B., 1101 E. Walnut St.

Lemmon, G. Bruce, Jr., Professional Bldg.
Leslie, James F., 1715 Boonville Ave.
Litton, Lyle D., Burge Hospital
Lockhart, Charles E., Professional Bldg.
Lowe, Horace A., Medical Arts Bldg.
Lowe, Horace A., Jr., Medical Arts Bldg.
Lurie, Harold H., Professional Bldg.
McAlhany, Howard J., 609 Cherry St.
Maddux, William P., Professional Bldg.
Maher, Robert W., Professional Bldg.
Maple, Francis M., 1211 S. Glenstone St.
Marshall, W. J., Professional Bldg.
Meyer, Claude B., R. 1, Nixa
Morton, Paul C., 1508 E. Stanford St.
Moseley, F. Thomas, 1332 S. Kentwood Ave.
Musick, James D., Medical Arts Bldg.
Napper, Marvin L., Professional Bldg.
O'Brien, James A., 525 N. 6th St., Muskogee, Okla.
Overend, Don S., 1211 S. Glenstone St.
Palcheff, Chris L., 1630 N. Jefferson St.
Park, William I., Jr., Professional Bldg.
Penninger, William H., Medical Arts Bldg.
Peterson, Stanley S., 1211 S. Glenstone St.
Plumlee, William C., Holland Bldg.
Polk, John W., Medical Arts Bldg.
Powell, Edwin M., Professional Bldg.
Prater, Bill G., Professional Bldg.
Pruett, Paul L., Professional Bldg.
Purcell, Elmer M., Professional Bldg.
Rainwater, E. H., Professional Bldg.
Rigney, Levi M., Woodruff Bldg.
Rosen, Max, Medical Arts Bldg.
Russell, Earl D., 1503 S. Glenstone St.
Scanlon, Robert C., 1711 Boonville Ave.
Schwartz, Eugene J., Professional Bldg.
Schweitzer, Fred C., Jr., Woodruff Bldg.
Sewell, Walter S., Professional Bldg.
Siceluff, Joseph G., 609 Cherry St.
Silsby, Don H., Landers Bldg.
Silsby, Don J., McDaniel Bldg.
Silsby, Harry D., Professional Bldg.
Simpson, Albert P., Springfield Medical Bldg.
Simpson, Emerson L., 1630 N. Jefferson St.
Smith C. Souter, 620 St. Louis St.
Smith, Harvey S., Burge Hospital
Snead, William H., Jr., Professional Bldg.
Stewart, Robert B., Professional Bldg.
Stewart R. Wendell, Professional Bldg.
Sundstrom, Frank D., 1211 S. Glenstone St.
Tarrasch, E. L., 1636 S. Glenstone St.
Taylor, William E., Southwest Missouri State College
Thomasson, David D., 1630 N. Jefferson St.
Tillman, Walter W., Jr., Professional Bldg.
Tsang, John L. K., 1636 S. Glenstone St.
Turner, Glenn O., Professional Bldg.
Upshaw, Paul O., Medical Arts Bldg.
Vail, A. Denton, Professional Bldg.
Wakeman, Jasper N. Woodruff Bldg.
Walker, William M., Professional Bldg.
Walsh, William T., 421 Beverly Ave., Morgantown, W. Va.
Webb, Leslie R., Jr., Professional Bldg.
White, R. Ned, Professional Bldg.
Williams, John W., Professional Bldg.
Williams, John W., Jr., Landers Bldg.
Wise, Gordon F., Professional Bldg.
Wittmer, S. C., Medical Arts Bldg.
Wood, William W., 1211 S. Glenstone St.
Wooldridge, W. E., Professional Bldg.
Yancey, Daniel L., 1211 S. Glenstone St.

GRUNDY COUNTY
(Grand River Medical Society)

HARRISON COUNTY
(Grand River Medical Society)

HENRY COUNTY MEDICAL SOCIETY

Bradshaw, W. D., Clinton
Brock, Bernard, Windsor
Hollingsworth, Ray S., Clinton
Hughes, Shelby B., Clinton
King, Richard H., Clinton
McIntyre, A. N., Clinton
Smith, James O., Clinton
Smith, William J., Windsor
Thurber, Claude M., Windsor
Walker, George S., Clinton
Walker, Hugh B., Clinton
Woltzen, Samuel W., Clinton

HICKORY COUNTY
(Dallas-Hickory-Polk County Medical Society)

HOLT COUNTY
(Nodaway-Holt-Atchison-Gentry-Worth County Medical Society)

HOWARD COUNTY MEDICAL SOCIETY

Allen, William C., 226 Stevenson Lane, Baltimore, Md.
Bloom, W. A., Fayette
Dean, Francis D., Fayette
Gardner, Joseph W., Glasgow
Leech, Maurice P., Fayette
Shaw, William J., Fayette
Shaw, William J., Jr., Fayette

HOWELL COUNTY
(South Central Counties Medical Society)

IRON COUNTY
(Mineral Area County Medical Society)

JACKSON COUNTY MEDICAL SOCIETY
(Kansas City)

Aaron, George A., 10901 Winner Rd., Independence
Adelman, Arthur, 751 E. 63rd St.
Agee, Loren G., 5801 Kingslee Dr., Hickman Mills
Ahlefeld, Charles B., 215 Pershing Rd.
Aisenstadt, E. Albert, 1204 W. 67th St.
Alberts, Phillip S., 8250 Forest Ave.
Allebach, H. K., Research Hospital
Allen, Charles E., Waldheim Bldg.
Allen, Charles H., 616 W. Maple St., Independence
Allen, Robert E., 411 Nichols Rd.
Allen, William B., 4620 Nichols Parkway
Alsop, Webb S., Jr., 411 Nichols Rd.
Altomare, Edward P., 2610 E. 63rd St.
Altringer, Arthur N., 305 W. 43rd St.
Altringer, Mary P., 8706 B. Blue Ridge Blvd., Hickman Mills
Anderson, A. Isadore, 723 W. 45th St.
Anderson, Raymond B., Plaza Time Bldg.
Anderson, Richard W., 1001 Romany Rd.
Andrews, Berneil W., 4620 Nichols Parkway
Andrus, Bailey C., Plaza Medical Bldg.
Appleford, George Burton, 215 Pershing Rd.
Arms, Arnold V., 4635 Wyandotte St.
Arst, Herbert E., 137 Austin, Salina, Kans.
Aschman, Theodore H., Plaza Time Bldg.
Asel, Norman D., Plaza Time Bldg.
Asher, Arthur G., Professional Bldg.
Atcheson, Bellfield, 5215 Sunset Dr.
Atwell, Floyd Carroll, 4620 Nichols Parkway
Aull, John, 6544 Summit Ave.
Bachmann, Paul L., 1212 W. Truman Rd., Independence
Baer, Alvin J., 751 E. 63rd St.
Baker, Philip J., 9306 E. New 40 Hwy., Independence
Ball, James E., 4917 College St.
Ballard, Volney B., Plaza Time Bldg.
Bare, Chester I., Jr., 9406 E. 63rd St., Raytown
Barelli, Pat A., 425 E. 63rd St.
Barnard, John L., Jr., 4312 Nichols Parkway
Barnes, Robert H., 2200 McCoy St.
Barnett, Gordon P., 751 E. 63rd St.
Barry, Gerald W., 3601a Troost Ave.
Barry, John W., General Hospital 1
Barry, William B., 116 W. 47th St.
Baum, Frank E., 701 E. 63rd St.
Baumhardt, Edward E., 4635 Wyandotte St.
Bay, Merrill R., 1808 W. Main St., Blue Springs
Becker, Richard R., 4000 Baltimore St.
Bee, James E., 3520 Broadway
Bell, William F., 18 E. 3rd St., Lee's Summit
Belot, Monti L., 7411 Highway 71, N.W., Parkville
Bennett, James D., 409 E. 63rd St.
Benoit, Hector W., Jr., Plaza Parkway Bldg.
Berenson, Sheldon E., 4620 Nichols Parkway
Bergmann, Victor H., 6165 N. Winthrop Ave., Chicago, Ill.
Bernreiter, Michael, Professional Bldg.
Berry, Guy N., Plaza Broadway Bldg.
Berry. Maxwell G., 5020 Summit St.
Biggs, Harry L., 63rd & Evanston Sts., Raytown
Bikales, Victor W., 425 E. 63rd St.
Bills, Marvin L., Plaza Time Bldg.
Black, Don A., Professional Bldg.
Black, Eugene C., Professional Bldg.
Blim, Richard D., Plaza Time Bldg.
Bolin, N. Venay, Plaza Parkway Bldg.
Boody, Robert J., Plaza Time Bldg.
Border, Charles T., 1701 Ruby Dr., Garland, Tex.
Bordy, Marvin D., 701 E. 63rd St.
Borenstine, Joseph, 751 E. 63rd St.
Boughnou, Harvey P., 315 Alameda Rd.
Bourke, Timothy S., Rialto Bldg.
Boutrous, Amin, 3112 Linwood Blvd.
Bowser, John F., Plaza Time Bldg.
Boyd, George K., Professional Bldg.
Bradford, John F., Professional Bldg.
Brams, Jack B., 751 E. 63rd St.
Braverman, Abe E., 701 E. 63rd St.
Brewster, Charlotte M., 2200 McCoy St.
Bridgens, James G., Independence Sanitarium, Independence
Brown, Adrian J., 4526 Paseo Blvd.
Brown, Irwin S., Plaza Time Bldg.
Brown, Robert S., 4706 Broadway
Brown, William R., Doctors Bldg.
Broyles, Glen H., Professional Bldg.
Brumm, Lawrence W., 6308 Troost Ave.
Bruner, Robert E., 912 Valentine Rd.
Brust, Carl H., 6114 Howe Dr., Mission, Kans.
Bryan, William H., Jr., 2122 E. 12th Blvd.
Buckingham, William, Professional Bldg.
Buckner, Robert C., Plaza Parkway Bldg.
Budke, Harold A., 306 E. 12th St.
Buhler, Victor B., St. Joseph's Hospital
Buie, Bruce R., 5801 Kingslee Dr., Hickman Mills
Bunting, Williston P., 305 W. 43rd St.
Burns, Beryl I., 29 S. State St., Salt Lake City, Utah
Burns, Robert R., Professional Bldg.
Butcher, Robert W., 1101 W. 86th St. Tr.
Butterworth, Nelson S., 231 W. 47th St.
Byers, Philip L., 4635 Wyandotte St.
Caffrey, Raymond J., 713 Main St., Grandview
Caldwell, John K., Argyle Bldg.
Callaway, Luther M., 306 E. 12th St.
Calovich, Emery R., 4620 Nichols Parkway
Campbell, Frederick B., Professional Bldg.
Campbell, John G., Professional Bldg.
Carbaugh, Glenn C., Bryant Bldg.
Carlson, Hjalmar E., Professional Bldg.
Carmichael, Francis A., Jr., Plaza Time Bldg.
Carrier, Edson C., Plaza Medical Bldg.
Caruso, Alfred A., 1222 McGee St.
Casady, Gilbert N., 3001 W. 48th St. Tr.
Casebolt, Buford T., 4000 Baltimore St.
Casebolt, Milton B., 4000 Baltimore St.
Casford, Ralph S., 315 Nichols Rd.
Castelaw, Rush E., 3731 Locust St.
Castles, John E., Argyle Bldg.
Cavaness, Ernest W., 1010 Neptune Dr., Leucadia, Calif.
Centner, Paul J., Professional Bldg.
Chambers, James Q., Jr., 4620 Nichols Parkway
Chandler, Robert A., Doctor's Bldg.
Chapman, Arthur H., Professional Bldg.
Chapman, Samuel B., Argyle Bldg.
Clark, Harold B., 2800 Dell Ave., Venice, Calif.
Clark, Irving H., 5801 Kingslee Dr., Hickman Mills
Clasen, Arthur C., 9102 W. Bay Harbor Dr., Miami Beach, Fla.
Cline, Merle A., 4126 St. John Ave.
Coburn, Donald F., Plaza Time Bldg.
Cochrane, Joheph J., 4706 Broadway
Cockerell, Sanford F., 11037 Winner Rd., Independence
Coffey, Ralph R., Professional Bldg.
Coffin, Theodore A., Professional Bldg.
Cohen, Harry K., 751 E. 63rd St.
Cohen, Hilliard, Menorah Hospital
Colglazier, Mary C., 3317 E. 43rd St.

Colom, George A., Plaza Theatre Bldg.
Comboy, Lawrence J., 925 Red Rd., Independence
Connell, Evan S., Commerce Bldg.
Conover, Charles C., 5930 Oakwood Ave.
Cooper, Charles S., Rialto Bldg.
Cooper, John H., Argyle Bldg.
Cooper, Leo F., 1220 E. 31st St.
Cortner, Mary C., 4526 Paseo Blvd.
Counsell, Chester M., 708 W. 17th St.
Cowherd, Joseph B., 63rd & Brookside Aves.
Cox, Kenneth E., 4635 Wyandotte St.
Cramer, Quentin, Professional Bldg.
Creditor, Morton C., Menorah Hospital
Crocker, Albert M., 2202 E. 31st St.
Culbertson, William F., 1253 Huntington Rd.
Curran, Edward J., Federal Reserve Bank Bldg.
Curran, Kevin E., Federal Reserve Bank Bldg.
Curran, Maurice Desmond, Federal Reserve Bank Bldg.
Curts, Calvin J., Professional Bldg.
Cutliff, Daniel J., 1222 McGee St.
Dann, David S., 701 E. 63rd St.
Davis, Herbert V., 4620 Nichols Parkway
Davis, Jack M., Raytown
Davis, John J., 9011 Delmar, Overland Park, Kans.
Davis, Kenneth A., 231 W. 47th St.
Davis, Robert C., Professional Bldg.
Day, Cameron B., St. Luke's Hospital
Decker, Albert I., 3000 West 73rd St.
DeMaria, Peter F., 8125 E. Gregory Blvd.
DeMott, John D., Professional Bldg.
DeMotte, John A., Plaza Medical Bldg.
Dennie, Charles C., Professional Bldg.
Deweese, Everett R., Rialto Bldg.
Dickson, Frank D., 4312 Nichols Parkway
Diveley, Rex L., 4312 Nichols Parkway
Dixon, Otto J., Professional Bldg.
Dixon, Vewiser L., 2204 E. 18th St.
Dlabal, Luke J., 1210 Ash Ave., Independence
Doane, William L., Grandview
Dodge, Mark, 4635 Wyandotte St.
Dodge, Milton, 701 E. 63rd St.
Doherty, William R., 2108 W. 75th St.
Dolezal, Joseph B., Bryant Bldg.
Dorsch, Ervin H., 10901 Winner Rd., Independence
Downey, James W., 425 E. 63rd St.
Drake, Roy F., Professional Bldg.
Draney, Thomas E., 4526 Paseo Blvd.
Drisko, Robert M., 4620 Nichols Parkway
Drowns, Bruce V., Professional Bldg.
Duer, Mildred C., 310 W. 47th St.
Duncan, Ralph E., P.O. Box 2597
Duncan, William H., Professional Bldg.
Dunleavy, James D., Wirthman Bldg.
Durnell, Monaford D., 18 E. Third St., Lee's Summit
Dwyer, Frank X., 4620 Nichols Parkway
Dwyer, Hugh L., 5408 Central St.
Edde, Clifford G., Argyle Bldg.
Edmonds, Devilla D., 4800 E. 24th St.
Eisemann, Gustave, 751 E. 63rd St.
Eldridge, Charles J., 409 E. 63rd St.
Elias, David J., 9306 E. New 40 Highway, Independence
Elliott, James R., 1080 Busch Garden Ct., Pasadena, Calif.
Elliott, Raymond G., Bryant Bldg.
Elliott, Wade E., 710 W. 12th St.
Ellis, Elmer F., 600 E. 22nd St.
Elser, Otto H., 10901 Winner Rd., Independence
Engel. Lawrence P., Plaza Medical Bldg.
Enna, Carl D., Argyle Bldg.
Eshelman, Albert D., 9306 E. New 40 Highway, Independence
Eubank, David F., Raytown
Eubank, Dillard M., Raytown
Eubank, William R., Bryant Bldg.
Eubank, William Y., Raytown
Farley, Claude C., 4526 Paseo Blvd.
Farney, Jacob P., 751 E. 63rd St.
Farnsworth, Jesse J., Professional Bldg.
Feierabend, Frank L., Argyle Bldg.
Feist, George V., 2400 Tomahawk Rd.
Ferguson, Donald S., 2012 E. 24th St.
Ferguson, James T., Bryant Bldg.
Ferris, Carl R., Argyle Bldg.
Finkle, Robert H., 9507 E. 80th Tr.
Fitzgerald, Robert H., 10901 Winner Rd., Independence
Flanders, Horace F., Professional Bldg.
Flatley, John A., 63rd & Raytown Rd., Raytown
Fleming, Royall B., 1433 E. 19th St.
Florian, Albert J., 1224 W. 69th Tr.
Folck, William P., Professional Bldg.
Forman, Louis H., 4635 Wyandotte St.
Forsythe, Robert W., Plaza Time Bldg.
Fowler, Fred D., 4706 Broadway
Fowler, James W., 1103 Grand Ave.
Fredeen, Robert C., Plaza Time Bldg.
Frick, John P., Professional Bldg.
Friedman, Morris L., 701 E. 63rd St.
Fritzlen, Thomas J., 39th and Rainbow Blvd.
Fuhrman, Donald L., Professional Bldg.
Fulton, Albert E., 2625 W. Paseo Blvd.
Gainey, Harold L., 4635 Wyandotte St.
Ganley, William C., Argyle Bldg.
Gard, Raymond F., 10901 Winner Rd., Independence
Garrison, Roy F., 6509 Prospect Ave.
Gaskins, John H., Plaza Parkway Bldg.
Geha, Braham J., 751 E. 63rd St.
Gelperin, Abraham, 2625 W. Paseo Blvd.
Gempel, Paul A., 315 Nichols Rd.
Gentry, Enoch N., Jr., Telephone Bldg.
Geraughty, Edward, Odd Fellows Home, Liberty
Gestring, Hugh A., 1220 E. 31st St.
Getelson, Joseph, Rialto Bldg.
Gibson, David M., St. Luke's Hospital
Gilkey, Harry M., Professional Bldg.
Gilliland, Oliver S., Professional Bldg.
Gillmor, Charles S., 420 E. Armour
Ginsberg, Norman A., 751 E. 63rd St.
Gist, William W., 330 W. 47th St.
Glasscock, Ernest L., Plaza Time Bldg.
Goldman, Stanley L., 751 E. 63rd St.
Goldsich, Edward, Plaza Theatre Bldg.
Goodman, Leroy, Plaza Time Bldg.
Goodson, William H., Jr., Professional Bldg.
Gorrell, Ned B., Route 1, Grandview
Gotham, James E., 2200 McCoy St.
Gottsch, Joseph C., 10901 Winner Rd., Independence
Grabske, Charles F., 10901 Winner Rd., Independence
Grabske, Charles F., Jr., 10901 Winner Rd., Independence
Graham, James W., Argyle Bldg.
Graham, Wallace H., Argyle Bldg.
Grauerholz, James W., Congress Bldg.
Greaves, Eli A., 7303 Madison Ave.
Green, John R., 10901 Winner Rd., Independence
Green, Stanley L., 10901 Winner Rd., Independence
Greene, W. Wallace, 4620 Nichols Parkway
Gregory, Ralph W., 4620 Nichols Parkway
Griffith, John A., Jr., Plaza Medical Bldg.
Growdon, John A., Professional Bldg.
Guffey, Don C., Professional Bldg.
Gundle, Sigmund, 425 E. 63rd St.
Gunn, Richard W., 317 N. Van Brunt St.
Haggen, Margaret, E., 6228 Agnes St.
Haight, John M., 3401 E. 12th St.
Haith, Walter F., 2462a Brooklyn St.
Haley, Jack A., Professional Bldg.
Hall, Thomas B., Professional Bldg.
Halperin, Philip H., 751 E. 63rd St.
Hamel, Herbert A., 6306 Morningside Dr.
Hamill, Robert W., 4620 Nichols Parkway
Handley, James M., 5635 Russell Ave., Mission, Kans.
Hanes, Lee D., 2200 McCoy St.
Hanes, Robert L., 701 E. 63rd St.
Hardacre, Ruth A., 3300 Charlotte St.
Harless, Morris S., 409 E. 63rd St.
Harned, Bert W., 4005 W. 66th, Prairie Village, Kans.
Hart, Lawrence W., 321 Ward Parkway
Hartwig, Frederick H., 701 E. 63rd St.
Hash, Emalyn H., 5832 McGee St.
Hashinger, Edward H., 7884 Lookout Dr., La Jolla, Calif.
Haynes, Lee, 820 Archibald St.
Haynes, Solon E., Professional Bldg.
Hazen, Robert M., Argyle Bldg.
Heller, B. Marcus, 409 E. 63rd St.
Hellerstein, Stanley, 751 E. 63rd St.
Helman, Richard G., 7721 State Line
Henry, Clarke L., Plaza Parkway Bldg.
Henry, Schubert D., 1115 Grand Ave.
Herrman, George V., Plaza Time Bldg.
Hess, Paul D., 8423 High Dr.
Hibbard, Blaine Z., Plaza Time Bldg.
Hickerson, William H., 604 W. Maple, Independence
Higgins, Robert S., 411 Nichols Rd.
Hill, Jack H., Trinity Lutheran Hospital
Hill, Jesse N., 1438 Hedges Ave., Independence
Hines, Paul, 2625 W. Paseo Blvd.
Hink, Frederick W., 10229 Independence Rd.
Hirsch, Joe E., 411 Nichols Rd.
Hodgson, Frank H., 4301 Main St.
Hoeper, Samuel D., 6232 Troost Ave.
Hoffman, Jacob S., 751 E. 63rd St.
Hoffmann, R. L., Professional Bldg.
Hogan, Daniel F., Route 100, Port Isabel, Tex.
Hogue, Frank S., Plaza Medical Bldg.
Holder, Thomas M., Mercy Hospital
Hollweg, Kenneth C., Bryant Bldg.
Holman, Melvin V., Plaza Parkway Bldg.
Holt, Waldo S., 4620 Nichols Parkway
Holton, Edward B., 10901 Winner Rd., Independence
Hook, Waller C., Professional Bldg.
Hooper, Robert N., Plaza Broadway Bldg.
Hughes, Gerald E., 6509 Prospect Ave.
Hungate, Carroll P., Argyle Bldg.
Hunt, Claude J., Professional Bldg.
Hunter, Martin P., Waldheim Bldg.
Hurwitt, Frank, Pickwick Hotel
Ingham, Walton C., 411 Nichols Rd.
Irland, Robert D., Union Station Hospital
Irwig, Fred, Professional Bldg.
Jackson, William R., Bryant Bldg.
Jacob, Walter H., 701 E. 63rd St.
Jacobs, Morton, 6416 Verona Rd.
Jacobs, Walter P., 751 E. 63rd St.
Jaime, Nicholas, 715 Westport Rd.
James, Otis E., Jr., 6306 Morningside Dr.
Jansen, Robert, 101 E. 63rd St.
Jarvis, James A., 4620 Nichols Parkway
Jeffries, Robert C., 6315 Brookside Plaza
Jennett, Harry N., 2701 Forest Ave.
Jennett, J. Harvey, Professional Bldg.
Johnson, C. Laurence, Professional Bldg.
Johnson, Edgar W., 4627 W. 70th St., Prairie Village, Kans.
Johnson, James S., 2202 E. 18th St.
Johnson, Thomas M., Balcony Bldg.
Johnson, William A., 2200 Prospect Ave.
Johnstone, Paul N., Bryant Bldg.
Jonas, Harry S., Jr., 11711 Markham Rd., Independence
Jones, George H., 1435 E. 78th St.
Jones, T. Reid, Plaza Time Bldg.
Justus, John B., Plaza Parkway Bldg.
Kantor, Julius M., 701 E. 63rd St.
Kantor, Samuel, 751 E. 63rd St.
Kartus, Irving, 6155 Oak St.
Katz, Milton, 4620 Nichols Parkway
Kaul, Philip G., Plaza Time Bldg.
Kealhofer, George C., 6627 Prospect Ave.
Keeler, James E., 4620 Nichols Parkway
Keith, Willis E., Argyle Bldg.
Kelly, Eugene H., 402 Wabash Ave.
Keltner, Raymond O., 9406 E. 63rd St., Raytown
Kennard, George K., 4635 Wyandotte St.
Kent, Bela K., Doctors Bldg.
Kent, Clifford F., Professional Bldg.
Kerr, Russell W., St. Joseph's Hospital
Ketcham, William M., Waldheim Bldg.
Ketron, Marvin B., 5933 Cherry St.
Ketterman, Grace H., 112 & 71 Highway, Hickman Mills
Ketterman, Herbert L, 9231 Belinder St.
Kettner, Edward G., Professional Bldg.
Kienberger, Paul A., 5246 St. John Ave.
Kiene, Richard H., 4312 Nichols Parkway
Kimball, Merritt H., 610 E. 36th St.
King, Walter R., Professional Bldg.
Kingsbury, Helen C., 6415 Sagamore Rd.
Kiser, David M., 920 W. 47th St.
Kitchen, William M., 425 E. 63rd St.
Klein, Edward H., Plaza Medical Bldg.
Klepinger, Dayton P., Neosho
Knight, John S., 305 W. 43rd St.
Knight, Lyle B., 18 E. 3rd St., Lee's Summit
Knoch, H. Kermit, Plaza Parkway Bldg.
Koehler, Charles A., Argyle Bldg.
Kohn, Cecil M., Doctors Bldg.
Korth, William M., Professional Bldg.
Kraft, Jacob, Doctors Bldg.
Kranson, Seymour J., 11200 Winner Rd., Independence
Kuhn, William F., II, 6247 Brookside Ave.
Kyger, Fred B., Professional Bldg.
Kyger, John E. J., 701 E. 63rd St.
Kyner, Thomas A., Wirthman Bldg.

Lacy, N. Eugene, Plaza Time Bldg.
Laffoon, France L, 869 Alta Vista Dr., Vista, Calif.
Lally, James J., Rialto Bldg.
Lamar, Robert F., Professional Bldg.
Lambert, Marian, 11610 S. 71 Highway, Hickman Mills
Landis, George K., Professional Bldg.
Laning, J. Halcombe, 6205 Brookside Ave.
Lapi, Angelo, St. Mary's Hospital
Lapi, Ruth M., 2012 Stratford Rd.
Lapp, Harry C., 751 E. 63rd St.
Latham, Raymond W., 4620 Nichols Parkway
Laurenzana, Frank P., 428 S. White St.
Layton, Ira C., Argyle Bldg.
Lee, George C., 601 E. Meyer Blvd.
Lehner, Richard L., Professional Bldg.
Leifer, William W., Doctors Bldg.
Leitch, Cecil G., 808 S. 15th St., Blue Springs
Leitz, Frank B., 6832 Locust St.
Lentz, Clark H., 215 W. Pershing Rd.
Leo, William A., Professional Bldg.
Levey, Harry B., 701 E. 63rd St.
Lewis, Revis C., Plaza Time Bldg.
Lichtor, Alexander, 751 E. 63rd St.
Lichtor, Joseph M., 751 E. 63rd St.
Lieberman, B. Albert, Jr., Professional Bldg.
Liersch, Joseph C., 815 E. Gregory Blvd.
Lilly, Terry E. Sr., 306 E. 12th St.
Lilly, Terry E., Jr., 306 E. 12th St.
Lindquist, Carl N., P.O. Box 679
Link, Vance E., 1201 W. 36th St., Independence
Linville, Howard E., Professional Bldg.
Loewy, Louise B., 2625 Paseo Blvd.
Lohrentz, Lois H., 1710 Independence Ave.
Long, Robert S., 4800 E. 24th St.
Love, Robert W., Jr., 6714 Tommie Lane, Millington, Tenn.
Lowell, Paul, 711 W. 46th St.
Lowrey, Ford J., Rialto Bldg.
Lundgren, Fred H., Jr., Plaza Medical Bldg.
Luppens, Albert F., R. R. 2, Box 265, Lee's Summit
Lyddon, Harold F., Jr., Westbrook Bldg.
Lyle, Ray M., 5725 Park Ave.
Lytton, George J., 2200 McCoy St.
McAlester, Andrew W., III, Liberty
McCalla, John P., 8824 E. Gregory St.
McCanse, Raymond A., Plaza Broadway Bldg.
McCarthy, Wm. F., 140a Lake Topawingo, Blue Springs
McClanahan, Robert C., Professional Bldg.
McConchie, James E., 10901 Winner Rd., Independence
McCoy, Frederick J., 701 E. 63rd St.
McCubbin, Clarence R., 701 E. 63rd St.
McCullough, Campbell C., Argyle Bldg.
McCunniff, Wm. B., Argyle Bldg.
McDonald, Bruce P., 2604 Prospect Ave.
McDonald, Victor G., Jr., Plaza Time Bldg.
McDonnell. John F., Plaza Medical Bldg.
McFarland, M. Donald, Plaza Medical Bldg.
McGannon, Paul T., 920 W. 47th St.
McHale, Thomas C., 4620 Independence Ave.
McIntyre, John D., 4620 Nichols Parkway
McKee, Joseph W., Professional Bldg.
McKee, Wallace P., Plaza Medical Bldg.
McLeod, John, Tower Bldg.
McMillan, Thomas E., Professional Bldg.
McPhee, William R., 1205 W. 76th St.
McPherson, Owen P., 12901 Grandview Rd., Grandview
McVay, James R., 856 W. 62nd St.
McVay, James R., Jr., V.F.W. Bldg.
MacInnis, Florence E., 4620 Nichols Parkway
Maclean, John A., 1301 Chavey Ravine Rd., Los Angeles, Calif.
MacNaughton, Robert A., 3208 W. 101st St.
Major, Hermon S., 3100 Euclid Ave.
Mangels, Kenneth A., 1212 W. Truman Ave., Independence
Mantz, Frank A., Jr., St. Joseph's Hospital
Marks, Mark M., Doctors Bldg.
Marsh, Alice, Pleasant Hill
Marshall, Cameron F., Plaza Theatre Bldg.
Masucci, Joseph M., Argyle Bldg.
Mathewson, Hugh S., 4620 Nichols Parkway
May, James W., 425 E. 63rd St.
Mayer, John H., Jr., Plaza Parkway Bldg.
Melgaard, S. Ross, 3001 W. 48th Tr.
Meriwether, Don R., 5109 W. 60th Tr., Mission, Kans.
Meyer, Paul W., 4312 Nichols Parkway
Meyers, Harold L., 751 E. 63rd St.
Miles, George O., Plaza Broadway Bldg.
Miller, Clint L., 18 E. 3rd St., Lee's Summit
Miller, Gerald L., 4706 Broadway
Miller, Max I., 2826 Main St.
Miller, Walter P., 6328 Baltimore Ave.
Miller, Wilson H., 4620 Independence Ave.
Mitchell, Andrew D., Plaza Time Bldg.
Mitchell, Robert H., Bryant Bldg.
Mixson, Wm. C., 4635 Wyandotte St.
Monahan, Elmer P., 17500 West 95th St., Lenexa, Kans.
Montello, Samuel A., 4620 Nichols Parkway
Montgomery, James G., Professional Bldg.
Mooney, Justin L., Bryant Bldg.
Mooney, Marcel L., 751 E. 63rd St.
Moore, Robert A., 106 W. 14th St.
Morest F. Stanley, Plaza Parkway Bldg.
Morgan, David B., 4620 Nichols Parkway
Moriarty, Lauren R., St. Mary's Hospital
Morrison, Donald H., Med. Dept., Bendix Aviation
Morrow, Raymond L., 17 W. 69th St.
Moss, Paul, 4706 Broadway
Mosser, Robert S., 3114 Norton, Independence
Mueller, Martin J., Argyle Bldg.
Mullen, Leo M., 4443 Paseo Blvd.
Multhauf, Cyril J., 1222 McGee St.
Mundy, William L., Professional Bldg.
Murphy, Robert J., 4301 Main St.
Myers, John S., Shukert Bldg.
Myers, Robert M., Rialto Bldg.
Myers, Wilson A., 425 Huntington Rd.
Needels, Orval T., 7400 Wornall Rd.
Nelson, Bentley, A., 305 W. 43rd St.
Nelson, Charles S., Westphalia, Kans.
Nesselrode, John H., 10901 Winner Rd., Independence
Nickson, Charles E., Jr., 10901 Winner Rd., Independence
Nicolay, Kenneth S., 4635 Wyandotte St.
Nigro, Dominic M., 1222 McGee St.
Nigro, E. Robert, 1222 McGee St.
Nigro, Joseph A., 1222 McGee St.
Noltensmeyer, Milton N., 3305 W. 50th Tr.
Nunn, Pat M., 1401 Southwest Blvd.
O'Brien, Leo A., Argyle Bldg.
O'Connell, Frank A., 7951 State Line
O'Connell, Gerald L., 12714 S. 71 Highway, Grandview
Ogilvie, John H., Box 157, Route 1, Gravois Mills
O'Hearne, John J., 4635 Wyandotte St.
O'Malley, James F., Broadway Plaza Bldg.
O'Neil, James H., 425 E. 63rd St.
Osgood, George M., Prairie Village Medical Bldg., Prairie Village, Kans.
Ost, Mark D., General Hospital
Overesch, Harry B., Professional Bldg.
Owens, Graham J., 906 Grand Ave.
Owens, Hugh H., Rialto Bldg.
Owens, Michael J., 701 E. 45th St.
Owens, Richard L., Rialto Bldg.
Owens, Robert H., Broadway Plaza Bldg.
Ozar, Milton B., 701 E. 63rd St.
Padfield, Earl G., Jr., Plaza Broadway Bldg.
Pakula, Sidney F., 751 E. 63rd St.
Pallett, Harold, A., Professional Bldg.
Parker, Elmer L., 3027 Campbell Ave.
Parker, Hubert M., Argyle Bldg.
Parsons, Eugene O., 315 Nichols Rd.
Passman, Harold. 701 E. 63rd St.
Patterson, John R., Plaza Time Bldg.
Patterson, William W., General Hospital 1
Pearson, Paul E., Rialto Bldg.
Peete, Don C., Professional Bldg.
Penner, Stanley, Mercy Hospital
Perll, Maurice F., 830 W. 61st Tr.
Perll, Rita D., 830 W. 61st Tr.
Perry, Ralph, 4800 E. 24th St.
Peters, Evelyn L., Menorah Medical Center
Peterson, Carl M., 2462a Brooklyn Ave.
Peterson, George L., 6333 Brookside Plaza
Peterson, Milton C., 701 E. 63rd St.
Peterson, Walter R., 2462a Brooklyn Ave.
Petry, Ezra L., 701 E. 63rd St.
Pfuetze, Edwin L., Plaza Parkway Bldg.
Pickard, Nicholas S., Plaza Time Bldg.
Pickens, Edgar E., 4826 Roanoke Parkway
Pierron, John B., 6516 Linden St.
Pinsker, Oscar T., Doctors Bldg., West
Piper, Donald K., Professional Bldg.
Pipkin, Garrett F., Argyle Bldg.
Pittam, Radford F., 418 Hyde Park, Hutchinson, Kans.
Polk, George M., Route 1, Box 3, Lee's Summit
Pollock, Leo H., 751 E. 63rd St.
Porter, Louis, 701 E. 63rd St.
Potter, Lee G., Professional Bldg.
Powell, Nelson E., St. Luke's Hospital
Powers, John M., 3304 Linwood Blvd.
Prentiss, Harry S., Rialto Bldg.
Preston, Albert, Jr., 4635 Wyandotte St.
Printz, Joseph H., 701 E. 63rd St.
Printz, Otto J., 701 E. 63rd St.
Pucci, Gregory L., 9923 Mercier St.
Puch, Richard G., 317 W. Kansas, Independence
Quer, Erich A., 701 E. 63rd St.
Quistgard, Paul C., 6741 Prospect Ave.
Rader, Ada B., Martin City
Ramey, Ehret O., 310 W. 47th St.
Ramos, John F., Jr., 2849 Indiana Ave.
Rannie, Paul R., 709 S. Fuller St., Independence
Rector, Joe L., Jr., St. Luke's Hospital
Reinhardt, George R., Professional Bldg.
Reister, Philip D., 814 W. 74th St.
Reitz, Carl H., 404½ W. 75th St.
Remley, George C., Argyle Bldg.
Reynolds, Clarence C., 2612 E. 39th St.
Rhoades, Arthur B., Professional Bldg.
Richardson, Marion W., 2526 Prospect Ave.
Richert, Robert C., General Hospital
Riller, Lowell E., Professional Bldg.
Rinkel, Herbert J., Bryant Bldg.
Roberts, Grosvenor G., 701 E. 63rd St.
Roberts, Harold M., Professional Bldg.
Roberts, Sam E., Professional Bldg.
Robinson, Arthur W., 6600 Wenonga Rd.
Robinson, Ernest K., Professional Bldg.
Robinson, G. Wilse, Jr., 2625 Paseo Blvd.
Robinson, William J., 751 E. 63rd St.
Robison, James T., Jr., 4620 Nichols Parkway
Rodgers, Samuel U., 2462a Brooklyn Ave.
Rohr, Joseph H., Plaza Parkway Bldg.
Rose, Charles Wm., 334 So. Van Brunt St.
Rubin, Sidney, 701 E. 63rd St.
Rubnitz, Leon H., 701 E. 63rd St.
Rufe, John R., Bryant Bldg.
Russell, James L., 2021 Mission St., Topeka, Kans.
Russell, Richard L., Professional Bldg.
Russell, Robert K., 63rd & Evanston Ave., Raytown
Saferstein, A. Lester, 6859 Cherry St.
Saladino, Anthony, Argyle Bldg.
Samuelson, Edward A., 4620 Nichols Parkway
Sanders, Harmon U., Jr., 10901 Winner Rd., Independence
Sanders, William F., 411 Nichols Rd.
Saper, Philip, 3 E. 3rd St., Lee's Summit
Sauer, Gordon C., 425 E. 63rd St.
Saunders, Everett L., 121 W. Lexington, Independence
Scarpellino, Louis A., St. Luke's Hospital
Schaerrer, Hans, 5110 White St.
Schaerrer, William C., 4635 Wyandotte St.
Schiffmacher, Jack E., 330 W. 47th St.
Schillie, Gene A., 425 E. 63rd St.
Schorer, Edwin H., 5049 Wornall Rd.
Schottman, Gerhard W., Jr., St. Luke's Hospital
Schutz, Carl B., 320 W. 47th St.
Schutz, Richard B., Plaza Time Bldg.
Seely, Clark W., Plaza Time Bldg.
Sewell, Minor F., 1722 W. 39th St.
Shapiro, Lazare M., 701 E. 63rd St.
Sheahon, John A., 7211 Richmond St.
Shecter, Nathan, 701 E. 63rd St.
Shelden, Russell D., 701 E. 63rd St.
Sheldon, John, 6305 Brookside Plaza
Shifrin, Alexander, 6709 Locust St.

Shireman, Kenneth L., 4606 St. John St.
Shockley, Clarence J., 231 W. 47th St.
Shofstall, Charles K., 300 W. 47th St.
Shuey, Herbert H., 3903 Brooklyn St.
Shypper, Moses J., 751 E. 63rd St.
Simon, Sanford, 701 E. 63rd St.
Sinclair, Alexander B., 920 W. 47th St.
Singleton, J. Milton, 315 Nichols Rd.
Skillman, Robert K., 4635 Wyandotte St.
Skinner, John O., Bryant Bldg.
Skinner, John T., Bryant Bldg.
Slentz, Edwin L., 4620 Nichols Parkway
Slentz, Wm. A., 4620 Nichols Parkway
Slickman, R. A., 8706 Blue Ridge Blvd.
Small, Walter L., Hyde Park Hotel
Smith, Arthur B., Argyle Bldg.
Smith, Dale C., 231 W. 47th St.
Smith, Hubert E., Plaza Time Bldg.
Smith, Ira T., Professional Bldg.
Smith, O. D., 7429 Riggs Lane, Overland Park, Kans.
Smull, Ned W., Plaza Time Bldg.
Sneid, Philip, Doctors Bldg.
Snider, Samuel H., 722 Ward Parkway
Spafford, Allen L., 315 Nichols Rd.
Stacey, Wallace R., 10901 Winner Rd., Independence
Staggs, William A., Argyle Bldg.
Staley, Harry R., Bryant Bldg.
Starke, Helen (Sister Paula Theresa), Queen of the World Hospital
Statland, Harry, 751 E. 63rd St.
Statland, Morris, 751 E. 63rd St.
Steele, James C., Jr., 4635 Wyandotte St.
Steffen, Lawrence F., Professional Bldg.
Stegman, Elmer G., 6137 Blue Ridge Blvd.
Stelmach, Walter J., 7949 State Line
Stockton, Raymond W., 411 Nichols Rd.
Stockwell, A. Lloyd, Professional Bldg.
Stotts, Charles S., 8221 Nall Ave., Prairie Village, Kans.
Stratemeier, Edward H., 9728 High Dr.
Summers, Caldwell B., Plaza Theatre Bldg.
Swisher, Robert C., 425 E. 63rd St.
Switzer, Clyde, R. R. 2, Grandview
Szabados, Ernest D., 10901 Winner Rd., Independence
Tarson, Solomon S., 3221 Troost Ave.
Tasker, Charles B., 30th & Wyandotte St.
Teall, Raymond E., Professional Bldg.
Terrill, Robert S., 208 Nichols Rd.
Tesson, James A. Rialto Bldg.
Theel, Otto W., Jr., 4301 Main St.
Thiele, George H., 6526 High Drive
Thomas, Christopher Y., Plaza Broadway Bldg.
Thompson, Charles L., Plaza Time Bldg.
Tice, Wayne K., Independence Sanitarium, Independence
Trippe, Harrison C. 6247 Brookside Ave.
Trowbridge, Barnard C., 415 E. 63rd St.
Trowbridge, Ellsworth H., 5317 W. 72nd St., Prairie Village, Kans.
Trowbridge, Ellsworth H., Jr., Professional Bldg.
Turner, Percy C., 1433 E. 19th St.
Tuthill, Herbert, Rialto Bldg.
Twin, Edward J., 701 E. 63rd St.
Twyman, Richard A., 4635 Wyandotte St.
Underwood, Dick H., Bryant Bldg.
Underwood, Harry A., 5100 E. 24th St.
Underwood, Johnson, Jr., Professional Bldg.
Underwood, Ross H., Bryant Bldg.
Unger, Harold, Doctors Bldg.
Upsher, Albert E., Argyle Bldg.
Valentine, Herbert S., 1020 W. 69th St.
Van Biber, James T., 317 W. Kansas Ave.
Van Buskirk, Terrance E., 5246 St. John Ave.
Van Buskirk, William C., Professional Bldg.
Vaughn, James W., Neurological Hospital
Vilmer, Charles, Professional Bldg.
Vincent, Jack C., 701 E. 63rd St.
Virden, Herbert H., Professional Bldg.
Voth, Harold W., Plaza Medical Bldg.
Wade, Frederick E., Professional Bldg.
Wakefield, Franklin, Jr., Bryant Bldg.
Walden, James M., 2204 E. 31st St.
Walker, James C., Professional Bldg.
Walker, John W., Argyle Bldg.
Walker, Orville C., Jr., Mercy Hospital
Wall, Arthur H., 153 Santa Anita, Sierra Madre, Calif.
Wall, Harry C., 751 E. 63rd St.
Wall, Leonard A., 4635 Wyandotte St.
Ward, Robert L., 4126 St. John St.
Watson, Ethel, First National Bank Bldg.
Waxman, David, 4840 Prospect Ave.
Waxman, Jane Z., 4840 Prospect Ave.
Webster, Joseph G., Plaza Parkway Bldg.
Weiford, Edward C., Plaza Broadway Bldg.
Welker, Joseph E., 6441 Summit Ave.
Weltscheff, Christo A., 315 Nichols Rd.
Wheeler, Charles B., General Hospital 1
Wheeler, John H., 411 Nichols Rd.
White, Charles H., 3001 W. 48th Tr.
White, George A., Shukert Bldg.
White, Stoughton F., 4620 Nichols Parkway
White, William E., Argyle Bldg.
Whiteman, John R., 6314 Brookside Plaza
Whitman, Doyle C., Sharp Bldg.
Whitmore, J. Stewart, 8816 Fairway
Wien, Irving A., Professional Bldg.
Wilhelm, Warren F., Professional Bldg.
Wilkinson, Charles B., Psychiatric Receiving Center
Wilkinson, Everett A., Professional Bldg.
Williams, Delon A., 1252 Stratford Rd.
Williams, Frank R., 4706 Broadway
Williams, Joseph C., Jr., 425 E. 63rd St.
Williams, Luke E., 2201 E. 27th St.
Williams, Robert A., 3701 Broadway
Williams, Roland D., 305 W. 43rd St.
Williams, Starks J., 2462a Brooklyn Ave.
Williams, Vincent T., Argyle Bldg.
Williamson, George L., Professional Bldg.
Willits, Lyle G., Professional Bldg.
Willoughby, Jean B., 5905 Main St.
Wilson, Clifford C., Plaza Time Bldg.
Wilson, Hester J., Plaza Time Bldg.
Winer, Herbert J., 751 E. 63rd St.
Winkelman, Esther B., 7449 Broadway
Winston, Bernard H., Doctors Bldg., East
Wise, George W., 4620 Nichols Parkway
Withers, Orval R., Plaza Parkway Bldg.
Wolf, Jack W., 409 E. 63rd St.
Woods, Harold V., 11404 Winner Rd., Independence
Woods, Walton C., TWA Overhaul Base, Parkville
Woodward, William W., 10901 Winner Rd., Independence
Wortmann, Robert F., 425 E. 63rd St.
Wright, R. Paul, Professional Bldg.
Wu, William Q., Doctors Bldg.
Yohe, Ruth M., 1710 Independence Ave.
Young, James E., 4635 Wyandotte St.
Young, Jesse W., 1401 Southwest Blvd.
Zellermayer, Jacob, Doctors Bldg.
Ziegler, Allen M., 330 W. 47th St.
Ziegler, Dewey K., 425 E. 63rd St.
Zoglin, Nathan M., Argyle Bldg.
Zuber, Harold V., Professional Bldg.

JASPER COUNTY MEDICAL SOCIETY
(Joplin)

Alberty, Omer L., Carl Junction
Allen, David O., Medical Arts Bldg.
Barlow, Donal E., 28 S. Webb St., Webb City
Barnett, Norman H., Medical Arts Bldg.
Beattie, John L., Creston Medical Clinic, Creston, Iowa
Birsner, Frank H., 1717 River St., Carthage
Black, Mervin H., Financial Reserve Bldg.
Blanke, Otto T., 418 Wall St.
Burch, John E., Medical Arts Bldg.
Byrd, Homer E., Carthage
Chesney, George W., Medical Arts Bldg.
Cohle, Richard R., 116 W. 3rd St., Carthage
Collins, Joe E., 2117 Connor St.
Collins, Mabelle B., 2117 Connor St.
Craig, Irwin T., Medical Arts Bldg.
Crawford, Archie L., Financial Reserve Bldg.
Crispell, Lawrence S., 6th & Pearl Ave.
Curl, Howard, 410 Jackson St.
DeTar, Burleigh E., 410 Jackson St.
DeTar, B. E., Jr., 410 Jackson St.
DeTar, George F., 410 Jackson St.
Dilday, Thomas F., Jr., Medical Arts Bldg.
Douglas, John W., 32nd & Oak Ridge Sts.
Douglass, Jesse E., 3427 W. Coleman Rd., Kansas City
Eliscue, Juliette M., 2002 Jackson St.
Ferguson, L. H., Jr., Medical Arts Bldg.
Ferguson, Ralph L., Medical Arts Bldg.
Ferguson, Robert M., 110 N. Webb St., Webb City
Grantham, Samuel A., Jr., 420 Byers St.
Graves, F. Burton, 114 E. 32nd St.
Hall, Marvin F., Financial Reserve Bldg.
Hamilton, Eugene H., Medical Arts Bldg.
Holtzman, Samuel, Medical Arts Bldg.
Hornback, Edward R., Financial Reserve Bldg.
Hurst, W. W., Medical Arts Bldg.
Isbell, Charles H., Carthage
Jeans, Virgil, Medical Arts Bldg.
Kiehl, Katharine, Miners Bank Bldg.
Koehler, John W., Medical Arts Bldg.
Kuhn, John R., Jr., Frisco Bldg.
Laney, Ronald L., 3140 Ocean St., Carlsbad, Calif.
Longenecker, Joe L., Financial Reserve Bldg.
McIntire, Emery J., 201 W. 3rd St., Carthage
McNew, William T., Carthage
McPike, Lloyd H., Financial Reserve Bldg.
Mack, Mary L., Address Unknown
Maddox, John D., 6th & Pearl Sts.
Meares, Cecil H., Jr., 420 Byers St.
Mitchell, Ernest, 2411 Cedar Bayou Rd., Baytown, Tex.
Paddock, Charles S., Medical Arts Bldg.
Papp, Sandor D., Medical Arts Bldg.
Patterson, Donald R., 418 Wall St.
Patterson, Grover S., 506 S. Main St., Carthage
Poor, Carl W., Neosho
Post, Winfred L., 617 Joplin St.
Schoeberl, C. B., Medical Arts Bldg.
Schulte, G. A., 2125 Jackson St.
Scorse, Sidney W., 2509 Jackson St.
Simmons, Leroy, Sarcoxie
Smith, Roland T., Medical Arts Bldg.
Smith, William R., 304 Grant St., Carthage
Walker, Paul W., Medical Arts Bldg.
Webster, Roger W., 863 Cherry Way, Hayward, Calif.
Wetzel, Fred S., Jr., 202 W. Fourth St., Carthage
Whitten, M. Foster, 616 W. Centennial St., Carthage
Wieman, Harry K., Medical Arts Bldg.
Wilson, Alice H., 1923 Sergeant St.
Wood, George H., 304 Grant St., Carthage
Wooldridge, Bart F., Medical Arts Bldg.
Wright, George W., 222 S. Webb, Webb City
York, William B., Sarcoxie
Young, Calvin C., Jr., Financial Reserve Bldg.

JEFFERSON COUNTY MEDICAL SOCIETY

Allbee, Roger H., Crystal City
Bolgar, Bertalan, Festus
Commerford, James J., Crystal City
Donnell, Harold E., DeSoto
Donnell, Robert H., Crystal City
Donnell, Thomas A., DeSoto
Edwards, Waldo B., 11 N. Taylor Ave., Kirkwood
Fallet, Charles E., DeSoto
Kozal, Francis L., Crystal City
McKinstry, Karl V., DeSoto
Mayfield, James L., Crystal City
Reich, Oliver F., Kimmswick
Rice, Carl E., Hillsboro
Rutledge, John F., Crystal City
Senn, Emmett J., Herculaneum
Sexauer, Arthur E., Ste. Genevieve
Yoskit, Harry, Festus

JOHNSON COUNTY MEDICAL SOCIETY

Cooper, R. L., Warrensburg
Damron, Oscar H., Warrensburg
Gonzalez, Mario G., Warrensburg
Grove, Gulph W., Knobnoster
Harkness, Harry, Warrensburg
Holmes, David R., 1017 Grovena Dr., Crestwood
Johnson, Charles S., Warrensburg
Jones, Keith D., Warrensburg
Lederer, Charles M., Warrensburg
Maxson, T. Reed, Warrensburg
Patterson, Wm. R., Warrensburg
Rawlins, Kelly, Holden
Sprehe, Daniel J., Warrensburg

KNOX COUNTY
(North Central Counties Medical Society)

LACLEDE COUNTY
(Mid-Missouri County Medical Society)

LAFAYETTE-RAY COUNTY MEDICAL SOCIETY

Best, Robert, Higginsville
Brady, Hugh S., Concordia
Brasher, Ben H., Lexington
Buehrer, Cletus E., Lawson
Cook, Thomas B., Richmond
Cope, Joseph S., Lexington
Crozier, Franklin A., Richmond
Davault, George K., Richmond
Fulkerson, Wilbur E., Higginsville
Goldberg, Isador E., Braymer
Kelling, Douglas G., Waverly
Kelling, Jordan, Waverly
Koppenbrink, Walter E., Jr., Higginsville
Lissack, Edmund, Concordia
Liston, Odus, Oak Grove
Martin, Wilfred E., Odessa
Payne, Bryan T., Lexington
Riley, Ralph W., Lexington
Ward, Joe, Lexington
Watson, Cecil L., Oak Grove
Williams, John W., Oak Grove

LAWRENCE COUNTY
(Ozarks Medical Society)

LEWIS-CLARK-SCOTLAND COUNTIES MEDICAL SOCIETY

Bridges, James R., Kahoka
Davis, Landis Y., Canton
Ellery, William L., LaGrange

LINCOLN-ST. CHARLES COUNTY MEDICAL SOCIETY
(St. Charles)

Berry, Paul T., Troy
Bruns, Kenneth, St. Charles Clinic
Canty, Eugene J., 114 N. Main St.
Commerford, John F., 114 N. Main St.
Creech, Joseph C., Troy
Crider, Russell J., St. Charles Hotel Bldg.
Damron, Edward O., Elsberry
DuMontier, R. J., O'Fallon
Fleming, Robert J., 114 N. Main St.
Fong, Richard R., 220 Grand Ave., Oakland 10, Calif.
Hetlage, Louis P., Troy
Jenkins, Joseph M., 117 S. Main St.
Keller, Robert M., Wentzville
Kister, George E., 302 S. Second St.
Muenster, Vincent P., 206 Washington St.
Neubeiser, Ben L., 206 Washington St.
Penn, Robert M., Silex
Poggemeier, William H., Jr., 302 S. Second St.
Randall, Don Q., 220 S. 6th St.
Roter, Alexander M., St. Charles
Rother, Paul H., 114 N. Main St.
Schneider, Vincent A., St. Charles Clinic
Shinkawa, Shigeo, St. Charles Clinic
Towers, Orville W., 114 N. Main St.
Tyler, Wendell H., 200 N. Main St.

LINN COUNTY
(Grand River Medical Society)

LIVINGSTON COUNTY
(Grand River Medical Society)

McDONALD COUNTY
(Ozarks Medical Society)

MACON COUNTY
(Chariton-Macon-Monroe-Randolph County Medical Society)

MADISON COUNTY
(Mineral Area County Medical Society)

MARIES COUNTY
(Mid-Missouri County Medical Society)

MARION-RALLS-SHELBY COUNTY MEDICAL SOCIETY
(Hannibal)

Archer, Perry C., Shelbyville
Bach, Lysle M., 1737 Harrison Hill
Birney, William P., 213 S. 5th St.
Burns, Francis R., 711 Grand Ave.
Canella, John M., 707 Broadway
Ellis, Sam T., Veteran's Hospital, Richmond 19, Va.
Francka, Wenceslaus F., 603 Country Club Dr.
Glascock, Donald W., Palmyra
Greene, Harry L., Holmes Bldg.
Hamlin, Wyeth, 711 Grand Ave.
Hardesty, Joel W., Holmes Bldg.
Johnson, Charles R., U. S. Naval Hospital, San Diego, Calif.
Landau, Daniel B., 711 Grand Ave.
Lanning, Robert J., B & L Bldg.
Levine, Ervan L., Vandalia
Lichty, Charles A., Shelbina
Lucke, Eugene M., Court House
Murphy, Bernard L., 2000 Crescent Dr.
Plowman, Edward M., Grand & Lincoln Sts.
Rapp, Earl L., 711 Grand Ave.
Roller, Merrill J., 2910 St. Mary's St.
Shanahan, Mary P., Monroe City
Smith, Ulysses S., Trust Bldg.
Smith, William J., Hannibal Trust Bldg.
Strong, Richard M., 711 Grand Ave.
Sultzman, Francis E., 115 N. 5th St.
Sweets, Henry H., Jr., 1406 Market St.
Walterscheid, John H., 508 Broadway
Well, J. W., Palmyra

MERCER COUNTY
(Grand River Medical Society)

MID-MISSOURI COUNTY MEDICAL SOCIETY
(Phelps-Crawford-Dent-Pulaski-Maries-Laclede Counties)

Andreassen, Dimil F., Highway 72 & Rolla, St., Rolla
Bass, B. J., 4th St. & Pershing, Salem
Baumann, A. R., Steeleville
Bonney, Samuel C., 2nd & Elm St., Washington
Butts, James D., Rolla
Carrington, Howard W., 119 N. Jefferson St., Lebanon
Casey, Shederic A., Lebanon
Crosby, Alice S., Hart Clinic, Salem
Davis, Harry H., Box 521, Rolla
Doty, Roy J., 10th & Bishop St., Rolla
Drake, Avery A., 302 E. 7th St., Rolla
Elders, Frank A., Jr., Cuba
Feind, Earl E., Rolla
Fisher, George E., 545 N. Jefferson St., Lebanon
Froelich, Rae W., Joe Knight Bldg., Lebanon
Garrison, T. W., Camdenton
Grosskreutz, Joseph A., St. James
Hammler, Christiana V., St. James
Hart, Martin M., R 2, Salem
Holley, Donald B., Camdenton
Hope, James L., Lebanon
Hunt, Lloyd H., Salem
Hurst, Ben B., 1122 Beverly, Lebanon
Irwin, William F., Leasburg
Jenkins, Paul A., Lebanon
Johnson, Ferrell H., Knight Bldg., Lebanon
Lytle, William R., Rolla Clinic, Rolla
Miller, Clyde S., Waynesville
Mitchell, Roy E., Salem
Myers, James M., 606 W. 6th St., Rolla
Riffel, Gordon Wm., Bourbon
Russell, Barbara E., Ramsey Bldg., Rolla
Scott, Elijah A., R. R. 2, St. James
Stricker, Emil A., St. James
Summers, Jacob H., Lebanon
Underwood, Millard K., Box 562, Rolla
Weeks, George R., 2850 Lear Dr., Cape Girardeau
Young, Robert B., 10th & Bishop St., Rolla

MILLER COUNTY MEDICAL SOCIETY

Buehler, Carl T., Jr., Eldon
Shelton, Edward O., Eldon

MINERAL AREA COUNTY MEDICAL SOCIETY
(St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve Counties)

Appleberry, Charles H., Rivermines
Brennan, John A., State Hospital 4, Farmington
Bugg, Andrew F., Lordsberg, N. M.
Bull, Ben M., Ironton
Carleton, Charles E., Jr., Medical Arts Bldg., Farmington
Chastain, Charles W., Jr., 301 W. Liberty, Farmington
Cresswell, George F., Potosi
Crouch, F. Richard, 714 Ste. Genevieve, Farmington
Dennis, W. Paul, 22 Science St., Flat River
Farrar, C. B., 721 N. Middle St., Cape Girardeau
Foster, Jack L., Desloge
Gaebe, Harold C., Desloge
Gay, George, Ironton
Grossman, Marvin, Schwaner Bldg., Fredericktown
Harland, R. E., Ironton
Haw, Marvin T., Jr., Bonne Terre
Hoctor, Emmett F., State Hospital 4, Farmington
Huckstep, Robert A., 43 Pine St., Farmington
Hunt, John W., Jr., Leadwood
Karraker, Alvan G., 507 North St., Farmington
Lanning, Richard C., Ste. Genevieve
Menne, Marvin C., 109 N. Main St., Ironton
Michaelis, Charles E., 135 S. Mine La Motte, Fredericktown
Mullen, Jack, 33 N. Allen St., Bonne Terre
Oliver, George A., Medical Arts Clinic, Farmington
Roebber, Harry M., Bonne Terre Hospital, Bonne Terre
Slaughter, Shelby C., Fredericktown
Taylor, Byron H., Jr., Fredericktown
Taylor, Van W., Box 466, Bonne Terre
Watkins, George L., Jr., 812 Dewey St., Farmington

MISSISSIPPI COUNTY
(Semo County Medical Society)

MONITEAU COUNTY MEDICAL SOCIETY

Fulks, Richard B., California
Gallagher, Lionel M., California
Kibbe, Edgar A., California
Latham, Kenyon S., California
McDonald, Terrence J., Tipton

MONROE COUNTY
(Chariton-Macon-Monroe-Randolph County Medical Society)

MONTGOMERY COUNTY MEDICAL SOCIETY

Andersen, Elmer J. T., Montgomery City
Byland, Samuel J., Wellsville
Helm, James O., New Florence
Hirsch, Albert, Vandalia

MORGAN COUNTY MEDICAL SOCIETY

Gunn, Jack, Versailles
Kauffman, Ruth, Versailles
Lyle, Robert R., Versailles
Washburn, J. Loren, Versailles

NEW MADRID COUNTY
(Semo County Medical Society)

NEWTON COUNTY)
(Ozarks Medical Society)

NODAWAY-HOLT-ATCHISON-GENTRY-WORTH COUNTIES MEDICAL SOCIETY

Bare, Edward F., 115 N. 3rd St., Tarkio
Bauman, Henry C., 121 S. Main St., Maryville
Bell, Charles T., 635 W. 3rd St., Maryville
Blacklock, David E., King City
Byland, Benjamin F., 131 S. Main St., Maryville
Carlin, Albert L., Park Ave., Stanberry
Carpenter, Wallace, 100 Cass St., Rock Port
Cossins, Carlos E., State Hospital 2, St. Joseph
Dunshee, Robert E., 406½ N. Main St., Maryville
Humberd, Charles D., Barnard
Imes, Elvin D., 119 N. Main, Maryville
Jackson, William R., Vine and First Sts., Maryville

Kinney, Max W., Mound City
Kirk, Charlie W., Hopkins
Matteson, Frank B., Grant City
Niedermeyer, Edward L., Tarkio
Perry, David C., Mound City
Poff, Joseph H., Albany
Rose, Frank H., Albany
Settle, Emmett B., Rock Port
Sweaney, Isaac F., Oregon
Wempe, G. Raymond, Maryville

NORTH CENTRAL COUNTIES MEDICAL SOCIETY
(Adair-Schuyler-Knox-Sullivan-Putnam Counties)

Cramb, Arthur B., 711 C. E. Orange St., Lakewood, Fla.
English, Milton T., Jr., 1400 S. Franklin, Kirksville
Freeman, Spencer L., Kirksville
Grim, Edward M., 201 E. Patterson Ave., Kirksville
Hart, Pearl V., Coatsville
Hasselblad, Oliver W., 1712 E. McPherson St., Kirksville
Hilton, Paul E., 112 E. Patterson St., Kirksville
Holman, Jurney H., Unionville
Isom, Waldo B., Knox City
Jones, John B., Kirksville
Luman, Frank E., Edina
Montgomery, John S., Milan
Stickler, Ralph O., Kirksville
Sullivan, William J., V. A. Hospital, Providence 8, R. I.
Tarvydas, Francis, Edina
Wimp, J. J., Kirksville

OREGON COUNTY
(South Central Counties Medical Society)

OSAGE COUNTY
(Unorganized)

OZARK COUNTY
(South Central Counties Medical Society)

OZARKS MEDICAL SOCIETY
(Barry-Lawrence-Stone-Christian-Taney-Newton-McDonald Counties)

Adriany, Joseph, State Sanatorium, Mount Vernon
Alsup, Frederick F., Box 276, Kalispell, Mont.
Anderson, Paul B., Box 32, Neosho
Aubin, Francis W., Branson
Bailey, Allen, Mount Vernon
Bennett, Joseph D., Branson
Blankenship, George W., Neosho
Bowman, Melvin C., Neosho
Brasher, Charles A., Mount Vernon
Brown, Frederick B., Aurora
Burney, Wallace S., Miller
Capetti, Alex P., Crane
Carter, James R., Neosho
Coffman, Esther E. L., 1514 13th St., N., Lakeworth, Fla.
Cohnberg, Rosellen E., Monett
Cowan, R. D., Aurora
Davis, Paul C., Neosho
Donley, Robert R., Monett
Edwards, Francis L., Monett
Evans, Harry T., Branson
Gillespie, Roy, Branson
Glass, William J., Jr., Monett
Glover, Kenneth, Mount Vernon
Graves, Arthur J., Mount Vernon
Hellweg, Charles E., Mount Vernon
Hobbs, George H., Mount Vernon
Imes, Clifford H., 11065 Linden St., Lynwood, Calif.
Kenney, Roy E., Neosho
Kerr, Frank T., Monett
Lamson, Roy C., Neosho
Langeluttig, Harry V., Mount Vernon
Lentz, Harold C., Neosho
McCallum, A. J. C., Aurora
Magness, William C., Branson
Maples, Floyd H., Mount Vernon
Mars, Hartley F., Forsyth
Morrison, T. A., Aurora
Newman, Mary Jane N., Cassville
Olive, George C., Neosho
Prince, Charles H., Cassville
Reynolds, James R., Neosho
Roper, Stanley D., Ozark
Royce, J. J., Noel
Russell, James M., Monett
Shumate, L. St. Clair, Reeds Spring
Stokes, Julius B., Excelsior Springs
Sweany, Henry C., Mount Vernon
Taylor, Leo T., Neosho
Threadgill, Jesse M., Forsyth
Whitehead, Frank F., Neosho
Wilson, Daniel R., Mount Vernon
Wommack, Fred L., Crane
Yates, J. Lewis, Mount Vernon

PEMISCOT COUNTY MEDICAL SOCIETY

Acuff, William J., 400 Carleton Ave., Caruthersville
Aquino, Philip J., Caruthersville
Beecher, Sheldon B., 1517 Rosedale Ave., Poplar Bluff
Bryant, William O., 223 S. 3rd, Hayti
Cain, Charles F., 400 Carleton Ave., Caruthersville
Caldwell, Jacob D., 223 S. 3rd St., Hayti
Chapman, J. R., Steele
Cook, O. W., Caruthersville
Cooke, James K., Jr., Box 142 Qtrs. 136 A, NAS, Cecil Field, Fla.
Cooper, Lawrence E., 1274 Hanton, St., Fort Myers, Fla.
Denton, Levi D., Hayti
Duckworth, John K., 223 S. 3rd St., Hayti
Grable, James, 120 E. Main St., Portageville
Gubin, Alan S., 106 W. 12th St., Caruthersville
Hensley, Daniel R. Wardell
Holcomb, Cecil E., 104 N. Crescent, Blytheville, Ark.
Limbaugh, Walter R., 202 E. Monroe St., Hayti
McCoy, Warren R., 106 W. 12th St., Caruthersville
McKaskle, Clarence W., 106 W. 12th St., Caruthersville
Morris, Clyde L., Caruthersville
Painter, Andrew E., 223 King St, Portageville
Painter, L. B., Jr., Portageville
Shirey, Arnold G., Hayti
Smith, Robert S., 408 Ninth St., Portageville

PERRY COUNTY MEDICAL SOCIETY

Carron, Oscar A., Perryville
DeGenova, G. H., Ste. Genevieve
Fairchild, James F., Perryville
Feltz, L. W., Perryville
Fischer Theodore, Altenburg
Legner, Stanley G., Perryville
Lutkewitte, Joseph F., St. Marys
McDermott, Alfred E., Perryville
Miller, Oliver J., Cape Girardeau
Quintana, Manuel M., Address Unknown
Riley, Fred P., Perryville
Utterman, William F., Perryville

PETTIS COUNTY MEDICAL SOCIETY
(Sedalia)

Beckemeyer, William A., 500 W. 16th St.
Bess, William E., 210½ S. Ohio St.
Boger, James W., 500 W. 16th St.
Brady, Charles H., Gordon Bldg.
Campbell, A. J., 312½ S. Ohio St.
Carlisle, John B., 1019 W. 6th St.
Daum, Harold F., Bothwell Memorial Hospital
Dyer, David P., 2511 Stephenson St.
Edwards, D. R., 700 Limit Ave.
Ewert, J. O., 412½ S. Ohio St.
Fisher, Stanley D., Sedalia
Gonser, Karl B., 101 S. Ohio St.
Hite, Henry A., Green Ridge
Hopkins, Thomas J., 700 S. Limit Ave.
Hopkins, Thomas S., 1609 S. Limit Ave.
Lamy, John E., 509 W. Broadway
Long, Frank B., Gordon Bldg.
Lowe, Alvin L., 1425 S. Grand Ave.
Maddox, Albert R., 116½ W. Main St.
Osborne, Charles D., 710 W. Broadway
Parkhurst, Charles L., Houstonia
Proctor, Donald C., 700 S. Limit Ave.
Rhodes, Euhlan L., Warsaw
Rodeman, John M., Gordon Bldg.
Siegel, Carl D., 1216 W. 18th St.
Siegel, Peter V., Smithton
Stauffacher, C. Gordon, 700 Limit Ave.
Stewart, Robert H., Bothwell Hospital
Walker, William E., LaMonte
Walter, Archie L., 500 W. 16th St.

PHELPS COUNTY
(Mid-Missouri County Medical Society)

PIKE COUNTY MEDICAL SOCIETY

Andrae, Robert L., Louisiana
Biggs, James B., Bowling Green
Christensen, Roger F., Louisiana
Hooker, John H., 3935 Connecticut Ave., St. Louis 16
Johnson, Q. Ray, Jr., Charity Hospital, New Orleans, La.
Lewellen, Charles H., Louisiana
Lewellen, Charles P., Louisiana
Martin, W. Joe, Louisiana
Middleton, John W., Louisiana
Scott, Clive D., Louisiana
Wilcoxen, William B., Bowling Green

PLATTE COUNTY MEDICAL SOCIETY

Blackwell, Charles W., Platte City
Calvert, Lewis C., Weston
Jennings, Ethlyn C., Rt. 4, N. Kansas City
Parker, H. Graham, Platte City
Robinson, John A., Edgerton
Thurman, H. C., Parkville
Wilson, John E., Platte City

POLK COUNTY
(Dallas-Hickory-Polk County Medical Society)

PULASKI COUNTY
(Mid-Missouri County Medical Society)

PUTNAM COUNTY
(North Central Counties Medical Society)

RALLS COUNTY
(Marion-Ralls-Shelby County Medical Society)

RANDOLPH COUNTY
(Chariton-Macon-Monroe-Randolph County Medical Society)

RAY COUNTY
(Lafayette-Ray County Medical Society)

REYNOLDS COUNTY
(Mineral Area County Medical Society)

RIPLEY COUNTY
(Butler-Ripley-Wayne County Medical Society)

ST. CHARLES COUNTY
(Lincoln-St. Charles County Medical Society)

ST. CLAIR COUNTY
(West Central Missouri Medical Society)

ST. FRANCOIS COUNTY
(Mineral Area County Medical Society)

STE. GENEVIEVE COUNTY
(Mineral Area County Medical Society)

ST. LOUIS MEDICAL SOCIETY
(St. Louis)

Abell, Walter E., 2253 S. 39th St. 10
Abrams, Morris, 4405 W. Pine Blvd. 8
Acker, Harry L., 6150 Oakland Ave. 10
Ackerman, Lauren V., 600 S. Kingshighway Blvd. 10
Adler, Benard C., 500 N. Skinker Blvd. 30
Agress, Harry, 634 N. Grand Blvd. 3
Ahern, Archibald M., 3915 Watson Rd. 9
Ahlering, George H., 950 Francis Pl. 5
Aitken, Louis F., 3720 Washington Blvd. 8
Albrecht, Franklin H., 245 Union Blvd. 8
Alden, Arthur M., 906 Olive St. 1
Aldrich, James T., 2621 Franklin Ave. 6
Alexander, Harry L., 52 Maryland Plaza 10
Allen, Henry C., Clayton Medical Bldg. 5
Allen, Hollis N., 634 N. Grand Blvd. 3
Allen, Melvin A., 3701 Grandel Sq. 8
Allen, Willard M., 630 S. Kingshighway Blvd. 10
Allen, William E., Jr., 720 N. Sarah St. 8
Altheide, J. Paul, 607 N. Grand Blvd. 3
Alvis, Bennett Y., 100 N. Euclid Ave. 8

Alvis, Edmund B., 100 N. Euclid Ave. 8
Anstey, George, 4660 Maryland Ave. 8
Apicella, Frank V., 5544 Pershing Ave. 12
Arneson, A. N., 457 N. Kingshighway Blvd. 8
Arney, William G., 16 Hampton Village Plaza 9
Aronberg, Lawrence M., 4652 Maryland Ave. 8
Arzt, Franz, 1790 E. Las Olas Blvd., Ft. Lauderdale, Fla.
Ash, Charles J., 1717 Canary Cove, Brentwood 17
Aufderheide, G. Russell, 2326 Noll Dr. 36
Austin, Martin G., 119 Summit Ave. 19
Ayars, Treston R., 607 N. Grand Blvd. 3
Aylward, Howard J., 410 Dielman Rd. 32
Azzouni, J. N., 8816 Gravois Ave. 23
Backer, Matthias H., Jr., 3923 Watson Rd. 9
Baggot, Michael G., 3520 Chippewa St. 18
Bailey, Drennan, 634 N. Grand Blvd. 3
Bailey, Frank A., 3108 S. Grand Blvd. 18
Bailey, Fred W., 4610 23rd Ave. N., St. Petersburg, Fla.
Balazs, Karl J., 3623 Cleveland Ave. 10
Bandle, Donald F., 5400 Arsenal St. 39
Banet, Samuel R., 7301 St. Charles Rock Rd. 33
Banton, William C., 2917 St. Louis Ave. 6
Barden, Frank W., 41 Beaver Dr., Creve Coeur
Bardenheir, J. Phil, 3903 Olive St. 8
Barker, Jesse W., 1504 S. Jefferson Ave. 4
Barnes, Charles R., 3720 Washington Blvd. 8
Barrett, Scott R., 5086 Easton Ave. 13
Bartels, Leo G., 906 Olive St. 1
Bartlett, Robert W., 100 N. Euclid Ave. 8
Bartlett, Willard, Jr., 634 N. Grand Blvd. 3
Bartnick, Mitchel L., 7615 S. Broadway 16
Bassett, Robert B., 5427 Delmar Blvd. 12
Bauer, John D., 2415 N. Kingshighway Blvd. 13
Bauer, Maria, 1935 Edison Ave., Granite City, Ill.
Bauer, Otto, 1935 Edison Ave., Granite City, Ill.
Baumgarten, Walter, Jr., 3720 Washington Blvd. 8
Bawell, Malcolm B., 4660 Maryland Ave. 8
Beare, J. Byron, 3720 Washington Blvd. 8
Becke, William G., 3720 Washington Blvd. 8
Becker, Bernard, 640 S. Kingshighway Blvd. 10
Becker, Edward J., 906 Olive St. 1
Becker, George H., 4500 Olive St. 8
Becker, Stanley C., 8110 Roxburgh Dr. 24
Beckette, Edmund S., 950 Francis Pl. 5
Beckman, Donald E., 4205 Virginia Ave. 11
Behrens, Donald T., No. 6 Thorndell Dr. 17
Belew, Joe E., 3271 January Ave. 39
Bell, Robert M., 3720 Washington Blvd. 8
Benincasa, Anthony V., 3731 Goodfellow Blvd. 20
Benjamin, Durand, 7430 Virginia Ave. 11
Bennett, Thomas T., 4500 West Pine Blvd. 8
Berard, Louis N., 812 Olive St. 1
Berg, Leonard, 52 Maryland Plaza 8
Berg, Ralph, 3203 S. Grand Blvd. 18
Bergman, Hugo F., 4409 W. Pine Blvd. 8
Bergner, Grace E., 114 N. Taylor Ave. 8
Berland, Harry I., 812 Olive St. 1
Berman, Joseph P., 1225 N. Grand Blvd. 6
Berman, William, 462 N. Taylor Ave. 8
Bernard, Harvey R., 4960 Audubon Ave. 10
Berry, John W., 950 Francis Pl. 5
Bersche, Bertram L., 5214 Pernod Ave. 9
Bettonville, Paul J., Jr., 6331 Pershing Ave. 30
Bilsky, Nathan, 2739 N. Grand Blvd. 6
Bindbeutel, Arthur H., 5203 Chippewa St. 9
Bindbeutel, D. A., 630 Westborough Pl. 19
Binder, Morton A., 4652 Maryland Ave. 8
Bircher, John L., 3932 Federer Pl. 16
Birdsall, Thomas C., 4660 Maryland Ave. 8
Birsner, Louis J., 634 N. Grand Blvd. 3
Bisno, Daniel, 8000 Bonhomme Rd. 5
Blache, J. Owen, 4924 Lotus Ave. 13
Blair, Vilray P., Jr., 100 N. Euclid Ave. 8
Blalock, William N., 114 N. Taylor Ave. 8
Bleyer, Adrien S., 607 N. Grand Blvd. 3
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Bock, Lux H., 1504 S. Grand Blvd. 4
Bockelman, Clifford H., 2615 Brentwood Blvd. 17
Boedeker, Roy V., 100 N. Euclid Ave. 8
Boemer, Lilburn C., 3720 Washington Blvd. 8
Boggs, Roy E., 1515 Lafayette Ave. 4
Bohne, William R., 4500 Olive St. 8
Bohrer, Harry C., 607 N. Grand Blvd. 3
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Bond, Leslie F., 5801 Easton Ave. 12
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Boyd, Arthur M., 1703 S. Grand Blvd. 4
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Brennan, Robert A., 3606 Gravois Ave. 16
Brennan, Robert V., 637 W. Adams St., 22
Brereton, Robert L., 206 N. Clay Ave. 35
Bricker, Eugene M., 100 North Euclid Ave. 8
Brielmaier, Charles R., 4475 W. Pine Blvd. 8
Brittingham, Thomas E., 6242 Waterman Ave. 5
Brockelmann, Erich, 508 N. Grand Blvd. 3
Brodeur, Armand E., 141 Horseshoe Dr. 22
Bronson, Shael S., 100 N. Euclid Ave. 8
Brookes, Henry S., Jr., 37 Algonquinwood Pl. 22
Brookes, Robert D., 4652 Maryland Ave. 8
Brooks, Arthur C., 60 Kingsbury Pl. 12
Broun, Goronwy O., 1325 S. Grand Blvd. 4
Broun, Goronwy O. Jr., 6359 Waterman Ave. 5
Brown, E. Eugene, 379 N. Taylor Ave. 8
Brown, James B., 100 N. Euclid Ave. 8
Brown, James L., 415 Pine St. 2
Brown, Seymour, 2 Ricardo Lane 24
Browning, S. Pearce, III, 4523 McKinley Ave. 10
Bruce, Helen L., 3263 Hawthorne Blvd. 4
Bryan, James H., 950 Francis Pl. 5
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Burns, Francis J., 4660 Maryland Ave. 8
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Burst, Donald O., 6500 Chippewa 9
Busch, Anthony K., 5300 Arsenal St. 39
Butcher, Harvey R., Jr., 4960 Audubon Ave. 10
Byars, Louis T., 100 N. Euclid Ave. 8
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Clithero, William H., 308 N. 6th St. 1
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Cutler, Harold M., 150 N. Meramec St. 5
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Dames, Richard J., 7735 Brookline Tr. 17

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Foster, Howard M., 2025 North & South Rd. 14
Foster, Leon, 634 N. Grand Blvd. 3
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Freedman, Ruth S., 607 N. Grand Blvd. 3
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Fries, William A., 4359 Taft Ave. 16
Friskel, Arthur K., 7422 Devonshire Ave. 19
Fritsch, Andrew J., 4931 Parkview Pl. 10
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Gandlmayr, Jack M., 3400 N. Kingshighway Blvd. 15
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Grant, John M., 114 N. Taylor Ave. 8
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Grueb, Paul M., 3402 California Ave. 18
Gruenfeld, Gerhard E., 4500 Olive St. 8
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Gulick, Charles R., 100 N. Euclid Ave. 8
Gum, William R., 2227 S. Broadway 4
Gummels, Belmot B., 7359 Dale Ave. 17
Gundlach, Arthur, 2202 University St. 7
Gunn, Walter T., 4617 Dahlia Ave. 16
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Hagan, Daniel J., 3915 Watson Rd. 9
Hagebusch, Omer E., 100 N. Euclid Ave. 8
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Hall, Lee A., 35 N. Central Ave. 5
Hall, Preston C., 3902 Lafayette Ave. 10
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Hamilton, Eugene G., 950 Francis Pl. 5
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Hanlon, C. Rollins, 1325 S. Grand Blvd. 4
Hanna, Richard E., 5535 Delmar Blvd. 12
Hansel, French K., 634 N. Grand Blvd. 3
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Hanser, Theodore H., 3701 Grandel Sq. 8
Hardy, Joseph A., 4952 Maryland Ave. 8
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Harkin, James C., 600 S. Kingshighway Blvd. 10
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Henke, Charles F., 3109 S. Grand Blvd. 18
Hennelly, John J., 16 Hampton Village Plaza 9
Henschel, Eugene V., 4401 Hampton Ave. 9
Herman, Morris, 3701 Grandel Sq. 8
Herrick, Harold C., LaGrange
Heusler, Anton F., 5400 Arsenal St. 39
Hewitt, Walter R., 7649 Delmar Blvd. 5
Heyer, Oscar C., 7714 S. Broadway 11
Hickey, Robert F., 634 N. Grand Blvd. 3
Hildreth, H. Rommel, 950 Francis Pl. 5
Hines, Arthur A., 10695 Bellefontaine Rd. 15
Hobart, Carl A., 5601 Devonshire Ave. 9
Hodges, Fred J., III, 510 S. Kingshighway Blvd. 10
Hoefer, Walter H. V., 3108 S. Grand Blvd. 18
Hoffmann, Augustin D., 6222 Delor St. 9
Hoffmann, Ronald E. (Address Unknown)
Hofstatter, Leopold, 258 Hampton Village Med. Center 9
Hofstatter, Lilli, 10053 Lakeside Dr. 23
Hogan, Patrick C., 2623 Telegraph Rd. 25
Holbrook, Charles K., 9901 Diamond Dr. 15
Holdenried, William E., 4131 Tholozan Ave. 16
Hollo, Vencel W., 4960 Laclede Ave. 8
Holt, Earl P., Jr., 7160 Washington Blvd. 5
Holtz, Alan S., 333 S. Kirkwood Rd. 22
Homan, J. S., 8641 Moran Pl. 14
Honich, Nicholas J., 8902 Riverview Blvd. 15
Horner, John L., 114 N. Taylor Ave. 8
Horwitz, Irwin B., 100 N. Euclid Ave. 8
Hosto, Leland E., 4909 Lindenwood Ave. 9
Houston, Vincent T., 7820 Carondelet St. 5
Hrdlicka, Victor E., 634 N. Grand Blvd. 3
Huber, Erwin T., 111 S. Meramec St. 5
Huck, Richard F., 9216 Clayton Rd. 24
Huggins, Albert M., 634 N. Grand Blvd. 3
Hulbert, Bernard, 462 N. Taylor Ave. 8
Hummel, Anton J., 5203 Chippewa St. 9
Humphrey, Harvey A., 510 S. Kingshighway Blvd. 10
Hunleth, Frank E., 7162 Jamieson Ave. 9
Hutchinson, James H., Jr., 114 N. Taylor Ave. 8
Hutto, A. Herman, 4500 Olive St. 8
Hutton, Joseph L., 316 Grimsby Rd. 29
Hyman, Anna, 5400 Arsenal St. 39
Hyndman, Charles E., 5724 Cates Ave. 12
Inkley, John J., 5203 Chippewa St. 9
Israel, Milton R., 311 Hillside Ave. 19
Ittner, George W., Jr., 600 N. Union Blvd. 8
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James, Norman A., 8321 N. Broadway 15
James, William M., 3720 Washington Blvd. 8
Janney, James G., Jr., 950 Francis Pl. 5
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Javaux, Everett J., 607 N. Grand Blvd. 3
Jean, J. Ted, 4500 West Pine Blvd. 8
Jensen, J. Ernest, 607 N. Grand Blvd. 3
Johnson, David S., 1430 Carroll St. 4
Johnson, Mitchell D., 40 N. Florissant Rd. 35
Johnstone, John, Jr., 206 W. Argonne St. 22
Jones, Andrew B., 3720 Washington Blvd. 8
Jones, Augustin, 634 N. Grand Blvd. 3
Jones, Grey, 4500 Olive St. 8
Jones, Otey S., 3616 S. Broadway 18
Jones, Richard A., 332 Calvert Ave. 14
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Jorstad, Louis H., 3720 Washington Blvd. 8
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Judy, Joseph, 111 Churst St. 35
Kamakas, Nicholas, 937 Airport Rd. 35
Kane, Clyde E., 706 Walton Ave. 8
Kaplan, Albert, 726 Country Club Dr. 21
Kappesser, Netajean B., 7044 Lindell Blvd. 5
Kappesser, Roland C., 7044 Lindell Blvd. 5
Karandjeff, A. D., 508 N. Grand Blvd. 3
Karl, Michael M., 4652 Maryland Ave. 8
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Kehoe, John J., 339 N. Taylor Ave. 8
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Keller, Joseph M., 3224 Copelin Ave. 4
Keller, Louis, 35 N. Central Ave. 5
Keller, Maurice J., 3701 Grandel Sq. 8
Kellett, John G., 243 Kenora Ct. 19
Kelley, Isaac D., Jr., 476 N. Kingshighway Blvd. 8
Kelley, Robert W., 3720 Washington Blvd. 8
Kelly, R. Emmet, Lindbergh & Olive St. Rd. Box 526
Kendig, John H., 4375 Forest Park Blvd. 8
Kerr, David N., 950 Francis Pl. 5
Kettelkamp, George D., 4931 Potomac St. 9
Keyes, Edward L., 4901 Washington Blvd. 8
Khayat, Azeez V., St. Elizabeth Hospital, Washington, D. C.
Kieffer, Roland S., 100 N. Euclid Ave. 8
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Kienzle, Edward C., 4075 S. Grand Blvd. 11
King, Francis C., 9929 Manchester Rd. 22
King, James P., 1465 S. Grand Blvd. 4
King, John V., 689 E. Big Bend Rd. 19
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King, Samuel J., 308 N. 6th St. 1
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Kinsella, Ralph A., Jr., 6305 Westminster Pl. 5
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Kissane, John M., 660 S. Kingshighway Blvd. 10
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Ladd, Charles B., 7430 Virginia Ave. 11
LaDriere, Raymond J., 35 N. Central Ave. 5
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Londe, Sol, 4500 Olive St. 8
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McDowell, Frank, 100 N. Euclid Ave. 8
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McFadden, James F., Jr., 950 Francis Pl. 5
McGee, John E., 1732 Red Bird Cove 17
McGinnis, Byron J., 16 Hampton Village Plaza 9
McKittrick, James E., 6636 Pershing Ave. 30
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Pernoud, Flavius G., Jr., 841 Audubon Dr. 5
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Reh, Edward P., 4500 Olive St. 8
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Allain, Mrs. James J., 3406 Neighbor Rd.
Ames, Mrs. William H., 2318 Lovers Lane
Augustine, Mrs. Robert W., 3306 Meuller Lane
Baker, Mrs. W. C., Savannah (Andrew County)
Bascom, Mrs. Charles H., 12 Crestview Village
Beck, Mrs. Paul M., 3216 Coronado Rd.
Benson, Mrs. Scott C., 1404 N. 26th St.
Berney, Mrs. Francis J., 1225 N. 10th St.
Bristow, Mrs. Robert B., 1610 Ashland
Butler, Mrs. E. F., 3804 Seneca
Byrne, Mrs. J. L., 1915 Lovers Lane
Carle, Mrs. H. W., Jr., 2707 N. 26th
Carpenter, Mrs. G. T., 2612 Indian Trail
Chiarottino, Mrs. Joseph F., 3 Lindenwood Lane
Christ, Mrs. Martin H., 6106 King Hill
Conrad, Mrs. Robert W., 1934 Mulberry
Craig, Mrs. Owen W. D., 1625 Crescent Dr.
Day, Mrs. Maxwell, 2111 Lovers Lane
DuMont, Mrs. Clement, 1905 Francis
Durham, Mrs. S. L., Dearborn
Fisher, Mrs. Joseph L., 2093 Ashland
Forgrave, Mrs. John R., 1908 Clay
Forgrave, Mrs. Leon P., Hundley Drive
Forman, Mrs. George W., 2414 Ashland
Grant, Mrs. Claude S., 7 Lindenwood Lane
Gray, Mrs. W. W., 3102 S. 22nd
Grimes, Mrs. M. E., 815 N. Noyes
Handler, Mrs. Eric, 1070 Crestview Lane
Harner, Mrs. C. G., 1080 Crestview Lane
Hartigan, Mrs. F. X., 1801 Ashland
Herman, Mrs. Allen I., 2323 Circle Drive
Howden, Mrs. Thomas L., 2723 Francis
Hughes, Mrs. Judson M., 2212 Eugene Field
Hunt, Mrs. William J., 2600 Pacific
Ide, Mrs. Lucien W., 1416 N. 25th
Kelley, Mrs. G. B., Savannah (Andrew County)
Kieber, Mrs. R. W., 1915 N. 33rd
Knepper, Mrs. Paul, 2002 Ashland
Kulowski, Mrs. Jacob, 2515 Francis
Lee, Mrs. Carlton H., 2716 Douglas
Lockhart, Mrs. William G., 2619 Lovers Lane
Luckinbill, Mrs. Paul, Plattsburg
Mabrey, Mrs. John P., 103 Main St.
Magnin, Mrs. R. L., 1813 Lovers Lane Heights
Martin, Mrs. John, 9 Lindenwood Lane
McDaniel, Mrs. John R., 1808 N. 29th
McDonald, Mrs. Wilbur P., Country Club Place
McGlothlan, Mrs. A. B., 821 N. 24th
Meluney, Mrs. S. E., 1810 N. 30th
Miller, Mrs. E. A., 2627 Frederick Ave.
Minton, Mrs. W. H., 2221 Eugene Field
Moen, Mrs. Berwyn H., 2823 Monterey
Morse, Mrs. Marvin W., 2702 Faraon
Mothershead, Mrs. John L., 2630 Fairleigh Ter.
Nelson, Mrs. Fred L., 624 N. 25th
Ness, Mrs. Carl K., 1824 Ashland
O'Connor, Mrs. William B., 2316 N. 22nd
Petersen, Mrs. Harold E., 2902 Frederick
Pfeffer, Mrs. Robert, 1915 N. 29th
Potter, Miss Bertha, 1112 Dewey Ave.
Potter, Mrs. Caryl, Jr., 2232 Eugene Field
Potter, Mrs. Thompson E., 2604 Pacific
Redmond, Mrs. William, 3102 Jule
Riddell, Mrs. Richard V., 2610 Indian Trail
Rogers, Mrs. John T., 2502 Ashland
Rosenthal, Mrs. Irwin, 2715 Union
Rost, Mrs. William B., 2221 Northwest Extension
Roundy, Mrs. Collis I., R. F. D. 2
Saferstein, Mrs. T. H., 2903 Sherman
Senne, Mrs. Herbert C., 1308 S. Noyes
Shevlin, Mrs. Charles F., 804 N. 25th
Smith, Mrs. Clifton, 2821 Ashland
Stallard, Mrs. Donald J., 1417 N. 25th
Tahir, Mrs. Mohammad, 1415 N. 24th
Thomas, Mrs. Forrest, State Hospital No. 2
Thompson, Mrs. F. Gregg, Jr., 631 Hall
Wadlow, Mrs. Ernest E., 2611 Lovers Lane
Waggoner, Mrs. Sharon E., 5820 S. 3rd
Warres, Mrs. Herbert, 22221 Carper Dr.
Weed, Mrs. Randall W., 1821 Clay
Whitsell, Mrs. Ora Earl, 2306 Sacramento
Willman, Mrs. Charles, 2923 Mitchel
Willumsen, Mrs. Henry C., 2209 Eugene Field

CAPE GIRARDEAU COUNTY
(Cape Girardeau)

Ashley, Mrs. Hugh V., Jr., 1201 Perry
Bahn, Mrs. Charles F., 2509 Fair Lane
Barnes, Mrs. Seth S., Bloomfield Rd.
Campbell, Mrs. Edward D., 1100 N. Henderson
Chapman, Mrs. Jean Allen, 1200 Sailer Circle
Cochran, Mrs. Jo Robert, 1633 Luce
Cook, Mrs. Norman, Sylvan Lane
Crowe, Mrs. John T., 1000 N. Henderson
Elrod, Mrs. D. B., Karau Lane
Estes, Mrs. Albert M., Highway 61
Herbert, Mrs. Charles T., Sylvan Lane
Hoxworth, Mrs. Gerald, 120 Sheridan
Jaeger, Mrs. J. N., 964 W. Adams, Jackson
Johnson, Mrs. Earl W., 1044 N. Henderson
Kasten, Mrs. Melvin C., 1453 Themis St.
Keim, Mrs. J. H., 643 N. West End Blvd.
Kinder, Mrs. James A., 348 N. Park
Kratz, Mrs. Paul E., 1720 Cecelia
Lovinggood, Mrs. Thomas A., Sylvan Lane
McDonald, Mrs. E. F., 225 W. Main, Jackson
McGinty, Mrs. Charles P., 372 N. Park
Nunnelly, Mrs. Gordon M., 1432 Themis St.
Nussbaum, Mrs. Paul B., 209 Sunset Blvd.
Oehler, Mrs. W. F., 1617 Themis St.
Otto, Mrs. Thomas G., 511 Alta Vista
Rapp, Mrs. Harold B., 1011 N. Henderson
Rawlins, Mrs. Fred E., 1651 Bertling
Reynolds, Mrs. Garland A., 537 Alta Vista
Ridings, Mrs. Harold D., 96 E. Cape Rock Dr.
Ritter, Mrs. R. A., 1257 Rockwood
Seabaugh, Mrs. D. I. L., 922 West Main St., Jackson
Seabaugh, Mrs. Loy R., 334 N. Ellis
Seabaugh, Mrs. William O. L., 23 N. West End Blvd.
Shoss, Mrs. Milton, West Cape Rock Dr.
Trolinger, Mrs. J. H., County Road, Jackson
Tygett, Mrs. Glen J., 834 Alta Vista
Wilson, Mrs. Charles F., 949 W. Cape Rock Dr.
Wolff, Mrs. Paul G., 90 E. Cape Rock Dr.

CLAY COUNTY

Aks, Mrs. Daniel, 772 Clardy Dr., Gashland
Allen, Mrs. S. Lloyd, Route 6, Box 404 B, Parkville
Bates, Mrs. G. Comer, 11 E. Briarcliff Rd., Kansas City 16
Boone, Mrs. Daniel C., 3329 Mohawk Lane, Kansas City
Bowles, Mrs. Richard, 101 Ridge, Liberty
Chastain, Mrs. Maurice W., 460 E. 56th Terr. N. Kansas City 16
Chiles, Mrs. David R., Smithville
Cox, Mrs. William L., 1469 Spruce, Liberty
Dunham, Mrs. R. H., Route 1, Liberty
Dwyer, Mrs. R. D., 1000 S. Woodland Dr., Kansas City 16
Edwards, Mrs. Theodore F., 2205 E. 39th St., N. Kansas City 16
Fischer, Mrs. Edward H., 4000 Indianola Dr., N. Kansas City
Fowler, Mrs. I. Charles, 700 E. Barnes, N. Kansas City
Gauer, Mrs. Robert J., 4916 N. Sherwood Dr., N. Kansas City
Gay, Mrs. Elmer E., 525 E. Lexington St., Richmond
Hartwig, Mrs. Fred, 5204 Pawnee Dr., Kansas City 3
Hayes, Mrs. Lawrence L., 1508 E. 51st N. Kansas City 16
Hendren, Mrs. Glen W., 516 W. Franklin, Liberty
Hobbs, Mrs. Earl B., Smithville
Hodge, Mrs. Robert H., 2204 E. 39th St. N. Kansas City 16
Knox, Mrs. Earl R., 115 E. 43rd St. N. Kansas City 16
Kovac, Mrs. Albert P., 1900 E. 28th Ave., N. Kansas City
Kuenzi, Mrs. Donald E., 205 E. 65th St. N. Kansas City 16
Lamar, Mrs. Robert F., 800 W. 53rd Terr., Kansas City 12
Langhus, Mrs. Melvin O., 104 W. Englewood Rd., Kansas City 16
Love, Mrs. D. M., 613 E. 66th St., Kansas City 10
McCormick, Mrs. James E., 309 Northcrest Dr., Kansas City 16
McCracken, Mrs. S. R., 810 Old Orchard, Excelsior Springs
Mullins, Mrs. B. L., Box 407, Rt. 1, Gashland
Musgrave, Mrs. David E., 420 N. Kimball, Excelsior Springs
Parker, Mrs. Robert Harvey, 112 E. 43rd St. N. Kansas City 16
Pate, Mrs. O. S., 104 E. 44th Terr. N. Kansas City
Petersen, Mrs. E. G., 6711 N. Wayne, Kansas City 18
Pileggi, Mrs. F. A., 307 W. 55th Terr. N. Kansas City 16
Revare, Mrs. Paul, 3245 Chippewa Dr., N. Kansas City
Robichaux, Mrs. Eugene B., 819 Linwood, Excelsior Springs
Roberts, Mrs. L. Marvin, 3906 E. 50th St. N. Kansas City 16
Sauer, Mrs. Gordon C., 5536 Central, Kansas City
Schertz, Mrs. Truman B., 416 Sagamore Lane, Kansas City 16
Schroeder, Mrs. Sydney O., 233 W. Franklin, Liberty
Spelman, Mrs. Arch E., Bridge St., Smithville
Sportsman, Mrs. Weldon L., 6309 N. Grand, Kansas City 16
Vescovo, Mrs. Paul C., Jr., Smithville
Werner, Mrs. Dean F., 5351 N. Spruce, Kansas City 16
Werner, Mrs. Franklin C., 422 Sagamore Lane, Kansas City
Williams, Mrs. John M., 616 Ridgeway Dr., Liberty
Willoughby, Mrs. James W., 420 N. Ridge, Liberty
Withrow, Mrs. John B., 5406 N. Wyandotte, Kansas City 16
Zacharias, Mrs. D. L., 6708 N. Oak Trafficway, Kansas City

COLE COUNTY
(Jefferson City)

Adams, Mrs. Charles F., 206 Cherry
Barden, Mrs. Frank W., 1717 Hayselton Dr.
Bedford, Mrs. Stephan V., 1504 West Main
Belden, Mrs. Edgar A., 1215 Moreland
Belinson, Mrs. Louis, 2008 Redwood Dr.
Bohrer, Mrs. Edward R., 1924 Hayselton Dr.
Bowe, Mrs. Edwin, 120 Boonville Rd.
Cassel, Mrs. William J., Jr., 1010 Holly Dr.
Clark, Mrs. Kendall A., 1436 Green Berry Rd.
Cox, Mrs. William A., 206 Swifts Highway
Dorris, Mrs. Richard P., 1104 Vineyard Sq.
Duval, Mrs. Addison, 1606c Jefferson Heights
Enloe, Mrs. L. David, 1200 Moreland
Exon, Mrs. C. Stuart, Boonville Rd.
Garner, Mrs. Lynn M., 403 Meier Dr.
Gay, Mrs. Lee Pettit, Osage City
Gove, Mrs. Herman S., 714 Broadway
Guhleman, Mrs. Henry V., Jr., 1710 Green Berry Rd.
Gurnee, Mrs. Landon H., 121 Westmore Dr.
Handler, Mrs. Fred P., 95 E. Circle Dr.
Hill, Mrs. James A., 220 E. McCarty
Kanagawa, Mrs. Harold Hajime, 734 Houchin St.
Kelly, Mrs. Marshall W., 1610 Green Berry Rd.
Leslie, Mrs. James P., 929 Fairmount
Leslie, Mrs. James T., 933 Fairmount
Loyd, Mrs. Earl L., 114 Binder Dr.
Loyd, Mrs. Herlan O., 2007 Wayne Ave.
Matthews, Mrs. John I., 1310 Moreau Dr.
McHaney, Mrs. John W., Highway 50 West
McKnelly, Mrs. Wm. V., 1213 Elmerine
Meier, Mrs. Francis X., 1703 Hayselton Dr.
Meinershagen, Mrs. C. W., 138 Forest Hill
Ossman, Mrs. Julian A., 2030 West Main
Rambo, Mrs. W. W., 510 Broadway
Russell, Mrs. Joseph P., 1010 Oak St.
Sennott, Mrs. John S., 102 Douglas Dr.
Shull, Mrs. G. Donald, 1925 Hayselton
Stauffer, Mrs. Harry B., 1906 Chicago Rd.
Stephan, Mrs. August P., 98 W. Circle Dr.
Stewart, Mrs. James, 1909 W. Main
Stricker, Mrs. Harold C., 1205 Moreau Dr.
Sugarbaker, Mrs. Everett D., 2313 W. Main
Summers, Mrs. Joseph S., Jr., 114 W. Circle Dr.
Tanner, Mrs. Robert H., 1606 Green Berry Rd.
Taylor, Mrs. Leon A., 1104 W. Main
Taylor, Mrs. Herbert I., 111 E. Circle Dr.
Tietjen, Mrs. Fred O., 213a Jackson
Watts, Mrs. Byron E., 2112 Forest Dr.

COOPER COUNTY

Abele, Mrs. William Arved, 13 Morningside Dr., Boonville
Allen, Mrs. William Cecil, 5th St., Glasgow
Avery, Mrs. Willard Bartlett, 20 Crestview Dr., Boonville
Beckett, Mrs. Theodore Cooper, 725 4th St., Boonville
Diekroeger, Mrs. M. L., R. F. D., No. 1, Boonville
Friedrichs, Mrs. Vernon David, Pilot Grove
Hata, Mrs. Daikichi, 7 Morningside Dr., Boonville
Humphreys, Mrs. E. Tristran, 1123 3rd St., Boonville
Stuart, Mrs. Byron McClellan, 910 Shamrock Terr., Boonville
Winn, Mrs. G. W. 415 4th St., Boonville
Ziegler, Mrs. William Henry, 1316 4th St., Boonville

DUNKLIN COUNTY

Baldwin, Mrs. Paul, 200 W. Washington, Kennett
Benson, Mrs. Leo J., Jr., 405 W. Washington, Kennett
Cofer, Mrs. J. C., 404 N. Walnut, Kennett
Croom, Mrs. D. W., 411 W. Park, Malden
Dempsey, Mrs. D. T., 602 St. Francis, Kennett
Dunmire, Mrs George Q., 504 Baker Dr., Kennett
Edmondson, Mrs. Charles T., 700 Stokelan Dr., Malden
English, Mrs. Wallace D., Box 67, Cardwell
Miltenberger, Mrs. Paul C., 705 W. Washington, Kennett
Morehead, Mrs. W. E., 609 Baldwin, Kennett
Palenske, Mrs. R. L., Box 57, Hornersville
Peck, Mrs. Chester Roehl, 234 S. Main, Kennett
Presnell, Mrs. U. A. V., 915 S. Jackson, Kennett
Spence, Mrs. E. L., 301 College, Kennett
Tarver, Mrs. Quinton, Box 115, Kennett
Williams, Mrs. Charles S., 202 W. Howard, Malden
Wilson, Mrs. Loys C., 915 S. Jackson, Kennett
Zimmerman, Mrs. Joe A., 906 W. Washington, Kennett

GRAND RIVER COUNTIES
(Caldwell-Carroll-Livingston-Grundy-Daviess-Harrison-Linn-Mercer-DeKalb Counties)

Allen, Mrs. Erroll Warren, 110 N. Ria, Carrollton
Bales, Mrs. Eugene, Carrollton
Bohnsack, Mrs. Ralph, 1017 Brookfield Ave., Brookfield
Carter, Mrs. Howard, Hamilton
Clark, Mrs. Chester L., 13 Town and Country, Trenton
Conrad, Mrs. Joseph, Chillicothe
Cullers, Mrs. C. H., 205 W. 12th St., Trenton
Daley, Mrs. Frank, Hamilton
Dixon, Mrs. John R., 1005 Brookfield Ave., Brookfield
Dowell, Mrs. Donald M., 1830 Calhoun St., Chillicothe
Duffy, Mrs. Edgar, 532 Pleasant View, Trenton
Duffy, Mrs. Oliver F., Rural Route 1, Trenton
Ellsworth, Mrs. Willard, Cainsville
Fair, Mrs. W. L., 1705 Calhoun St., Chillicothe
Fuson, Mrs. William, 520 Pleasant View, Trenton
Gale, Mrs. Joseph, 1710 Polk St., Chillicothe
Gary, Mrs. George, 112 W. Hauser, Marceline
Gearhart, Mrs. Merriam, 2100 Beekman, Bethany
Grace, Mrs. C. M., 1309 Locust, Chillicothe
Howell, Mrs. Billy Dale, 416 Shelby, Brookfield
Magill, Mrs. Joseph S., Milan
Mairs, Miss Catherine, 412 E. 7th St., Trenton
Mandler, Mrs. George, 1616 Clay, Chillicothe
Nibbe, Mrs. Albert F., 1207 S. 15th, Bethany
Platz, Mrs. John H., 16 N. Monroe St., Carrollton
Smith, Mrs. Robert Windle, 509 E. Hauser, Marceline
Sweiger, Mrs. James H., Maysville
Vandiver, Mrs. Virgil Dale, 1836 Polk St., Chillicothe
Vinyard, Mrs. Jack L., R. D. 2, Carrollton

GREENE COUNTY
(Springfield)

Allen, Mrs. Jerry H., 1324 S. Fairway Terr.
Anthony, Mrs. Dallas D., 1322 S. Pickwick
Ashley, Mrs Thomas E., Rt. 12, Box 1057
Atkinson, Mrs. Thomas E., Jr., Rt. 9, Box 635
Auner, Mrs. Cecil, 649 McCann
Bonebrake, Mrs. MacDonald D., 1443 Delaware
Brown, Mrs. Alex L., 2424 Sheridan Blvd.
Brown, Mrs. James T., 724 E. Stanford
Brown, Mrs. Lyman D., 1212 N. Sherman
Burkey, Mrs. Jordan W., 2405 Sheridan Blvd.
Busiek, Mrs. Paul, Rt. 9, Box 598
Busiek, Mrs. Urban J., 1635 E. Walnut
Callaway, Mrs. Guy D., 1155 S. Delaware
Callaway, Mrs. Guy D., Jr., 901 E. Portland
Cheek, Mrs. W. Carey, 1535 E. Meadowmere

Christy, Mrs. Raymond A., 2868 Eastmoor
Clarke, Mrs. Michael J., 2416 Brentwood Blvd.
Clary, Mrs. William F., 2259 Mirabeau
Clawson, Mrs. James W., 2305 E. Latoka
Clayton, Mrs. Edgar L., 2446 Brentwood Blvd.
Cochran, Mrs. Thomas E., Jr., 2423 Brentwood Blvd.
Coller, Mrs. Frederick C., 2433 Marlan
Conrad, Mrs. Raymond C., 1338 S. Delaware
Crawford, Mrs. Oral B., 1445 Wayland
Cunningham, Mrs. Darral D., 1425 S. Delaware
Delzell, Mrs. William A., Willard
Dietz, Mrs. Mortimer Wendell, 945 E. University
Dillard, Mrs. Erin M., 2530 Marlan
Dills, Mrs. Joseph N., 2323 Terrace
Duncan, Mrs. Robert D., 1234 E. Loren
Elkins, Mrs. Ronald F., 1307 E. Delmar
Ellis, Mrs. Francis J., 2235 E. Glenwood
Evans, Mrs. Ezra L., Jr., 1260 E. Catalpa
Farthing, Mrs. Fred R., 1234 E. Walnut
Farthing, Mrs. Gene W., 1235 E. Walnut
Ferguson, Mrs. John P., 1219 S. Clay
Ferguson, Mrs. John P., Sr., 1045 E. Linwood Dr.
Ferrell, Mrs. Thomas E., Jr., 1525 E. Meadowmere
Fessenden, Mrs. Ersel M., 634 Kingsbury
Fitch, Mrs Max, 2523 S. Marlan
Francis, Mrs. William C., 2134 Luster
Freeman, Mrs. Samuel F., 1500 N. Jefferson
German, Mrs. Walter A., Jr., 2659 Luster
Glynn, Mrs. Robert R., 1101 Benton
Good, Mrs. James T., 1029 E. University
Gorelick, Mrs. David F., 1041 Linwood Terr.
Gose, Mrs. Don F., 1339 Delaware
Griot, Mrs. George A., 1640 E. Sunshine
Hahn, Mrs. Andrew L., 1344 E. Portland
Hall, Mrs. David W., 2122 Wayland Dr.
Hall, Mrs. Durward G., Rt. 12, Box 445
Hanan, Mrs. Ernest B., 675 S. Kickapoo
H'Doubler, Mrs. Francis T., Rt. 7
H'Doubler, Mrs. Francis T., Jr., 2336 E. Glenwood
Horton, Mrs. James D., 1235 E. Delmar
Jameson, Mrs. James E., 2753 Luster
Johnson, Mrs. Warford B., 2244 Edgewood
Johnson, Mrs. William F., 1858 S. Jefferson
Johnston, Mrs. Joseph L., 1855 S. Jefferson
Key, Mrs. James S., 2117 Valley Rd.
Klingner, Mrs. George Malcolm, 2003 E. Sunshine
Knabb, Mrs. Henry F., Jr., Rt. 8, Box 1078
Knabb, Mrs. Kenneth E., 1229 E. Catalpa
Kolze, Mrs. Vernon W., 1854 Valley Rd.
Kooiker, Mrs. Clarence, 1512 S. Kings
Lanston, Mrs. Walter R., 1453 S. Fairway Terr.
Lemmon, Mrs. George Bruce, Jr., 648 S. Florence
Leslie, Mrs. James F., 1418 Benton
Litton, Mrs. Lyle D., 3044 Shalimar
Lockhart, Mrs. Charles E., 1600 E. Catalpa
Lowe, Mrs. Horace Arch, Jr., 1700 E. Walnut
Lurie, Mrs. Harold H., 2433 Langston
Maple, Mrs. Francis M., 2230 Mirabeau
Marshall, Mrs. Homer C., 1666 E. Meadowmere
McAdoo, Mrs. Hosea W., 2753 Luster Blvd.
McAlhany, Mrs. Howard J., 1258 E. Elm
Mitchell, Mrs. Raymond E., 1141 S. Kentwood
Moseley, Mrs. F. Thomas, 2102 S. Dollison
Napper, Mrs. Marvin L., Ash Grove
Overend, Mrs. Don S., 2215 Catalina
Palcheff, Mrs. Chris L., 1939 E. Wayland
Park, Mrs. William I., Jr., 815 E. Portland
Penninger, Mrs. William H., 2246 E. Clairborne
Peterson, Mrs. Stanley S., 721 E. Stanford
Plumlee, Mrs. William C., 919 E. Walnut
Polk, Mrs. John W., 1560 S. Delaware
Powell, Mrs. Edwin M., 807 S. Weller
Prater, Mrs. Bill George, 657 S. Weller
Pruett, Mrs. Paul, 1036 E. Sunshine
Purcell, Mrs. Elmer M., 2347 E. Latoka
Rigney, Mrs. Levi M., 1561 S. Fairway Terr.
Russell, Mrs. Earl D., 2102 Cinderella
Scanlon, Mrs. Robert C., 2429 S. Kings
Schwartz, Mrs. Eugene J., 1315 E. Loren
Schweitzer, Mrs. Fred C., Jr., 2550 S. Luster
Sewell, Mrs. Walter S., 2707 S. Marlan
Siceluff, Mrs. Joseph G., RFD 3
Silsby, Mrs. Don J., 932 S. Pickwick
Simpson, Mrs. Albert P., 2202 Barataria
Simpson, Mrs. Emerson L., 1023 E. Portland
Smith, Mrs. Harvey S., 963 S. Delaware
Snead, Mrs. William H., Jr., 2532 Sheridan
Stewart, Mrs. Robert Bell, 2360 E. Grand
Stewart, Mrs. R. Wendell, 2028 Windsor Dr.
Tarrasch, Mrs. Ernest L., 2114 Langston
Thomasson, Mrs. David Delzell, 2311 E. Glenwood
Tillman, Mrs. Walter W., Jr., 1220 E. Loren
Turner, Mrs. Glenn O., 1462 S. Dollison
Upshaw, Mrs. Paul O., 2222 Englewood
Vail, Mrs. A. Denton, 1307 E. Catalpa
Wakeman, Mrs. Jasper Newton, 1402 E. Meadowmere
Walker, Mrs. William M., 1930 Arcadia Ave.
Webb, Mrs. Leslie Richard, 1647 E. Walnut
White, Mrs. R. Ned, 806 S. Weller
Williams, Mrs. Robert F., 1000 W. Walnut
Wise, Mrs. Gordon F., 2850 Southern Hills Blvd.
Wittmer, Mrs. S. C., 2314 E. Washita
Wood, Mrs. William W., 1854 Berkley
Wooldridge, Mrs. Wilfred E., 1126 E. Stanford
Yancey, Mrs. Daniel L., 1133 S. Weller

JACKSON COUNTY
(Kansas City)

Aaron, Mrs. George, 612 W. 69th St., 13
Aisenstadt, Mrs. E. Albert, 1204 W. 67th St.
Allebach, Mrs. Hobart K. B., 3810 W. 65 Terr. 15
Allen, Mrs. Charles H., 616 W. Maple, Independence
Allen, Mrs. Robert E., 2511 W. 64th St. 15
Allen, Mrs. William Bayne, 6416 Ensley Lane
Altomare, Mrs. Edward P., 3223 Gladstone Blvd. 23
Altringer, Mrs. Arthur N., 5630 Mission Dr. 15
Anderson, Mrs. Raymond B., 6024 State Line 13
Anderson, Mrs. Richard W., 1001 Romany Rd. 13
Andrus, Mrs. Bailey C., 6508 Overbrook Rd. 15
Arms. Mrs. Arnold V., 6421 High Dr. 15
Aschman, Mrs. T. H., 87th and Brooklyn 30
Asel, Mrs. Norman D., 1259 Stratford Rd. 13
Asher, Mrs. A. Graham, 5410 State Line 12
Atcheson, Mrs. Bellfield, 5215 Sunset Dr. 12
Atwell, Mrs. Floyd C., 630 W. 60th Terr.
Atwood, Mrs. John M., 6519 Valley Rd. 13
Ayres, Mrs. Samuel, 305 W. 51st Terr. 12
Bachman, Mrs. Paul L., 1206 W. Truman Rd., Independence
Baer, Mrs. Alvin J., 5800 Howe Dr., Mission, Kansas
Baker, Mrs. Phillip J., 11440 E. 47th 33
Ballard, Mrs. V. Bryce, 4408 W. 74 Terr., Prairie Village 15, Kansas
Barelli, Mrs. Pat, 5609 Mission Dr. 15
Barnard, Mrs. John L., 444 W. 67th St. 13
Barnes, Mrs. Robert H., 6714 Kenwood 13
Barnett, Mrs. Gordon P., 6568 High Dr. 15
Barry, Mrs. John W., 217 W. 67th Terr. 13
Barry, Mrs. William, Park Lane Hotel, 4600 J. C. Nichols Pkwy.
Bay, Mrs. Merrill R., Woods Chapel Rd., Blue Springs
Becker, Mrs. R. R., 5622 Holmes St. 10
Bennett, Mrs. J. D., 3216 W. 69th St. 15
Benoit, Mrs. Hector W., Jr., 2501 W. 64th 15
Berenson, Mrs. Sheldon E., 427 E. 79th St. 10
Bernreiter, Mrs. Michael, 1246 W. 63rd St. 13
Berry, Mrs. G. Neill, 1025 W. 62nd St. 13
Berry, Mrs. Maxwell G., 5735 Ward Pkwy. 13
Biggs, Mrs. Harry L., 9504 E. 63rd St., Raytown
Bikales, Mrs. Victor W., 5810 High Dr. 15
Bills, Mrs. Marvin L., 3309 W. 68th St. 15
Black, Mrs. Don A., 2700 W. 67th St., Prairie Village 15, Kansas
Black, Mrs. Eugene C., 5640 Mission Dr.
Blim, Mrs. Richard Don, 3204 W. 71st St. 15
Bohan, Mrs. Peter T., 420 E. Armour 9
Bolin, Mrs. N. Venay, 5720 Howe Dr., Mission, Kansas
Bordy, Mrs. Marvin D., 8710 Belleview 14
Borenstine, Mrs. Joseph, 7307 Holmes 5
Boughnou, Mrs. Harvey P., 660 W. 61st Terr. 13
Bourke, Mrs. Timothy S., 4535 Rockhill Terr. 10
Bowser, Mrs. John F., 3701 Madison 11
Brams, Mrs. Jack B., 5050 Oak 12
Braverman, Mrs. Abe Elliott, 611 E. 109th Terr. 10
Bridgens, Mrs. James G., 613 Red Road, Independence
Brown, Mrs. Adrian J., 12 E. 63rd St. 13
Brown, Mrs. Irwin S., 3301 W. 68th St. 15
Brown, Mrs. William R., 7317 Conser, Overland Park, Kansas
Bruner, Mrs. Robert E., 912 Valentine Rd. 11
Brust, Mrs. Carl H., 6114 Howe Dr., Mission, Kansas
Buckner, Mrs. Robert, 3507 W. 87th St. 15
Budke, Mrs. Harold A., 1219 W. 66th Terr. 13
Buhler, Mrs. Victor B., 5212 Belleview 12
Buie, Mrs. Bruce R., 6905 E. 113th Terr., Hickman Mills
Bunting, Mrs. Williston P., 1231 W. 62nd 13
Butcher, Mrs. Robert W., 1101 W. 86th Terr. 14
Byers, Mrs. Philip L., 5832 High Dr. 15
Caffrey, Mrs. Raymond J., 1314 W. Red Bridge Rd. 10
Caldwell, Mrs. John K., 436 E. 65th Terr. 31
Calovitch, Mrs. Emery, 4400 Roanoke Pkwy. 12
Campbell, Mrs. Frederick B., 1032 W. 55th St. 13
Campbell, Mrs. John G., 827 W. 60th Terr. 13
Carbaugh, Mrs. Glenn C., 1234 Huntington Rd. 13
Carlson, Mrs. Hjalmar E., 2025 W. 48th Terr. 12
Carmichael, Mrs. F. A., 5750 Oakwood Rd. 2
Carrier, Mrs. Edson C., 2410 W. 64th St. 15
Casady, Mrs. Gilbert N., 2700 W. 77th St., Prairie Village, Kansas
Casford, Mrs. Ralph S., 1236 W. 72nd St. 14
Castles, Mrs. John E., 620 W. Dartmouth Rd. 13
Centner, Mrs. Paul J., 4304 W. 66th St., Prairie Village 15, Kansas
Chambers, Mrs. James Q., Sr., 3634 Holmes St. 9
Chapman, Mrs. Arthur H., 1020 W. 70th Terr. 13
Cheeseman, Mrs. William B., 5302 W. 79th Terr., Prairie Village 15, Kansas
Clark, Mrs. Irving H., R. R. No. 1, Grandview
Clasen, Mrs. Arthur C., 310 W. 49th St. 12
Coburn, Mrs. Donald F., 5255 Ward Pkwy. 12
Cochrane, Mrs. Joseph J., 9615 Grandview Rd., Hickman Mills
Cockerell, Mrs. Sanford F., 3501 S. Chrysler, Independence
Coffey, Mrs. Ralph Ringo, 814 Rockwell Lane 12
Cohen, Mrs. Harry K., 417 W. 70th 13
Cohen, Mrs. Hilliard, 1291 W. 72nd Terr. 14
Cooper, Mrs. Charles S., 308 W. 67th Terr. 13
Counsell, Mrs. C. M., 708 W. 17th St. 8

Cowherd, Mrs. Joseph B., 634 W. 69th Terr. 13
Cox, Mrs. Kenneth E., 5640 Pembroke Lane 15
Cramer, Mrs. Quentin, 4810 W. 77th Pl., Prairie Village 15, Kansas
Cross, Mrs. Walter M., 4511 Holmes St. 10
Culbertson, Mrs. William F., 1253 Huntington Rd. 13
Curran, Mrs. Desmond, 6626 Wenonga Terr. 15
Curts, Mrs. Calvin J., 7419 Terrace
Dann, Mrs. David S., 1215 W. 67th St. 13
Davis, Mrs. Jack M., 4417 Blue Ridge Blvd. 33
Davis, Mrs. Herbert V., 4601 Holmes St. 10
Davis, Mrs. Robert C., 659 W. 61st Terr. 13
Day, Mrs. Cameron Blaine, 2 E. 109th Terr. 14
Decker, Mrs. Albert I., 3000 W. 73rd St., Prairie Village 15, Kansas
DeMott, Mrs. John D., 4402 Homestead Dr., Prairie Village 15, Kansas
DeMotte, Mrs John A., 1245 W. 56th St. 13
Dennie, Mrs. Charles C., 2600 Verona Rd. 15
Deweese, Mrs. Everett R., 3316 W. 69th St. 15
Dlabal, Mrs. L. J., 3729 Blue Ridge, Independence
Dodge, Mrs. Mark, 600 W. 58th St. 13
Dolezal, Mrs. Joseph B., 7928 Outlook, Prairie Village, Kansas
Dorsch, Mrs. E. H., 3516 Claremont, Independence
Downey, Mrs. James W., 2400 W. 51st Terr. 3
Drake, Mrs. Roy F., 6200 W. 62nd Terr., Mission, Kansas
Draney, Mrs. Thomas E., 6426 Holmes St. 10
Draney, Mrs. Thomas L., 6415 Main St.
Drisko, Mrs. Robert M., 9904 Hocker Dr., Merriam, Kansas
Duncan, Mrs. Ralph Emerson, 1267 W. 61st St. 13
Duncan, Mrs. William H., Jr., 808 W. 69th St. 13
Duncan, Mrs. William H., Sr., 501 Porte Cima Pas 14
Durnell, Mrs. Monaford D., 1011 W. 1st St., Lee's Summit
Dwyer, Mrs. Frank X., 6408 Verona Rd. 15
Edmonds, Mrs. D. D., 9009 Mission Rd. 15
Eisemann, Mrs. Gustave, 7908 Campbell 31
Elias, Mrs. David J., 10311 Sheley, Independence
Elliot, Mrs. B. Landis, 4712 Roanoke Pkwy. 12
Elliott, Mrs. Raymond G., 6136 Reinhardt Dr., Mission, Kansas
Engel, Mrs. Lawrence P., 2335 Guilford Lane 15
Eshelman, Mrs. Albert D., 7608 E. 49th Terr.
Etzenhouser, Mrs. Merrill, 1215 W. 35th Terr., Independence
Etzenhouser, Mrs. Russell D., 1317 W. College, Independence
Eubank, Mrs. Dillard M., 6020 Elm, Raytown, 33
Eubank, Mrs. Will R., 6113 Lane, Raytown, 33
Eubank, Mrs. William Y., 6411 Morningside Dr. 13
Farley, Mrs. Claude C., 5122 W. 69th Terr., Prairie Village 15, Kansas
Farney, Mrs. Jacob P., 5811 Blue Hills Rd. 10
Farnsworth, Mrs. Jesse J., 5608 Fairway 3
Feierabend, Mrs. Frank L., 7345 Wyoming 14
Feist, Mrs. George V., 2400 Tomahawk Rd. 15
Ferguson, Mrs. Eugene H., 5840 High Dr.
Ferguson, Mrs. James T., 718 E. Armour 9
Ferris, Mrs. Carl R., 629 W. 70th Terr. 13
Findley, Mrs. J. Wallace, 14 W. 57th Terr.
Finkle, Mrs. Robert H., 9507 E. 80th Terr., Raytown 33
Fitzgerald, Mrs. Robert H., 4761 Eastwood Dr. 29
Flanders, Mrs. Horace F., 3820 W. 65th Terr. 15
Folck, Mrs. William P., 5804 Linden Rd. N. W., Parkville
Forman, Mrs. Louis H., 2801 W. 67th St. 15
Forsythe, Mrs. Robert W., 6457 Verona Rd. 15
Foster, Mrs. Hal, 5050 Oak 12
Fowler, Mrs. Fred D., 4911 Pawnee Dr., Kansas City 3, Kansas
Fowler, Mrs. James W., 7708 Briar Dr., Prairie Village 15, Kansas
Francisco, Mrs. Clarence B., 3621 Wyncote Lane, Kansas City 3, Kansas
Frankl, Mrs. George, 4215 W. 62nd Terr., Mission, Kansas
Fredeen, Mrs. Robert C., 5437 Canterbury Rd., Kansas City 3, Kansas
Frick, Mrs. J. Paul, 116 Huntington Rd. 13
Friedman, Mrs. Morris L., 2516 W. 64th 15
Fulton, Mrs. Albert E., 7245 Terrace St. 14
Fuhrman, Mrs. Donald L., 2708 W. 71st St. 15
Gainey, Mrs. Harold L., 6438 Indian Lane 15
Ganley, Mrs. William C., 8400 Oldham Dr. 38
Gard, Mrs. Raymond F., 11530 Winner Rd., Independence
Garrison, Mrs. Roy S., 404 W. 67th Terr. 13
Gaskins, Mrs. John H., 9210 Manor Rd. 15
Geha, Mrs. Brahm, 627 E. 69th St. 31
Gelperin, Mrs. Abraham, 6038 Wyandotte 12
Gempel, Mrs. Paul A., 5322 Falmouth Rd. 3
Gentry, Mrs. E. N., 810 W. 69th St. 13
Gestring, Mrs. Hugh A., 3915 W. 90 Terr., Overland Park, Kansas
Getelson, Mrs. Joseph, 4430 J. C. Nichols Pkwy. 11
Gibson, Mrs. David M., 5318 Sunset Dr. 12
Gilkey, Mrs. Harry M., 4941 Westwood Rd. 12
Gillmor, Mrs. C. Stewart, 420 E. Armour 9
Ginsberg, Mrs. A. Morris, 5000 Oak 12
Ginsberg, Mrs. Norman A., 1220 W. 67th St. 15
Gist, Mrs. W. L., 108 E. 65th Terr. 13
Gist, Mrs. W. Wilmot, 1208 W. 59th St. 13
Goldman, Mrs. Max, 235 Ward Pkwy. 12
Goldman, Mrs. Stanley L., 5734 Windsor Dr., Mission, Kansas
Goldsich, Mrs. Edward, 6834 Lamar, Overland Park, Kansas
Goodman, Mrs. Leroy, 2119 W. 70th Terr. 15
Goodson, Mrs. W. H., Jr., 46 E. 54th St. 12
Grabske, Mrs. Charles F., 1314 W. Truman Rd., Independence
Graham, Mrs. Wallace, 5157 Ward Pkwy. 12
Grauerholz, Mrs. James W., 4203 Mercier 11
Green, Mrs. John R., 915 S. Main, Independence
Green, Mrs. Stanley L., 1248 S. McCoy, Independence
Greene, Mrs. W. Wallace, 2008 W. 68th St. 15
Griffith, Mrs. George, 4010 Harrison 10
Griffith, Mrs. John A., Jr., 6500 Granada Dr. 15
Growdon, Mrs. John A., 1207 Stratford Rd. 13
Gundle, Mrs. Sigmund, 5926 Windsor Dr., Mission, Kansas
Haight, Mrs. John Max, 5609 Blue Ridge Blvd. 33
Hall, Mrs. Thomas B., 5632 Mission Rd. 3
Halperin, Mrs. Phillip, 1011 W. 56th St. 13
Hamel, Mrs. Herbert A., 6441 High Dr. 15
Hamill, Mrs. Robert W., 6945 Nieman Rd., Shawnee, Kansas
Hanna, Mrs. Minford A., 7427 Village Dr., Prairie Village, Kansas
Harless, Mrs. Morris S., 6844 Cherry 10
Hartwig, Mrs. Fred H., 5204 Pawnee Dr., Kansas City 3, Kansas
Haynes, Mrs. Solon E., 5306 Holmes 10
Hazen, Mrs. Robert M., 4606 W. 70 Terr., Prairie Village, Kansas
Heller, Mrs. B. Marcus, 627 W. 68th Terr. 13
Helman, Mrs. Richard G., 6540 Wenonga Rd.
Henry, Mrs. Clarke L., 6616 Wenonga Terr. 15
Henry, Mrs. S. David, Rt. No. 2, Quivera Lake 6
Herrman, Mrs. George V., 828 Greenway Terr. 13
Hess, Mrs. H. Lewis, 750 W. 47th St. 12
Hess, Mrs. Paul D., 8423 High Dr. 15
Hibbard, Mrs. Blaine Z., 7433 Village Dr., Prairie Village 15, Kansas
Hickerson, Mrs. J. C., 1210 S. Main, Independence
Hickerson, Mrs. William H., 43rd & Chrysler, Independence
Hill, Mrs. Jack H., 8115 Meadow Lane
Hink, Mrs. Fred W., 524 Hardy 22
Hirsh, Mrs. Joe Elbe, 14 E. Porte Cima Pas 14
Hodgson, Mrs. Frank H., 1049 W. 55th St. 13
Hoeper, Mrs. Samuel D., 13009 12th St., Grandview
Hoffman, J. S., 5820 Cherokee Dr., Mission, Kansas
Hoffmann, Mrs. R. Lee, 6533 Rainbow Ave. 15
Hogan, Mrs. Daniel F., 4912 Bell 12
Holbrook, Mrs. Ralph W., 700 W. 48th St. 12
Hollweg, Mrs. Kenneth C., 808 W. Meyer Blvd. 13
Holman, Mrs. Melvin V., 4815 W. 103rd St., Overland Park, Kansas
Holt, Mrs. Waldo S., 5901 Sunrise Dr., Mission, Kansas
Holton, Mrs. Edward, 2817 Westport Rd., Independence
Hook, Mrs. Waller G., 9238 State Line 15
Howard, Mrs. Joseph W., 6026 McGee 13
Hungate, Mrs. Carroll P., 6845 Oak 13
Hunt, Mrs. Claude J., 615 W. 56th St. 13
Hunter, Mrs. Martin P., 450 W. Meyer Blvd. 13
Ingham, Mrs. Walton C., 9723 Overbrook Rd. 15
Irwig, Mrs. Fred, 5109 W. 87th St., Overland Park, Kansas
Jackson, Mrs. Carl A., 2305 W. 79th St., Prairie Village 15, Kansas
Jackson, Mrs. Jabez N., Park Lane Hotel, 4600 J. C. Nichols Pkwy. 12
Jacob, Mrs. Walter P., 1002 Romany Rd. 13
Jacobs, Mrs. Morton, 6416 Verona Rd. 15
Jacobs, Mrs. Walter H., 4122 W. 53rd Terr. 13
James, Mrs. Otis E., Jr., 2810 W. 68th St. 15
Jansen, Mrs. Robert, 440 E. 66th St. 10
Jarvis, Mrs. James A., 600 W. 57th St. 13
Jeffries, Mrs. Robert C., 8505 Belinder Rd. 15
Jennett, Mrs. J. Harvey, 5311 Mission Woods Rd., Kansas City 3, Kansas
Johnson, Mrs. Paul A., 121 N. Chelsea 23
Johnstone, Mrs. Paul N., 117 W. 69th Terr. 13
Jonas, Mrs. Harry S., 11711 Markham Rd., Independence
Jones, Mrs. T. Reid, 5927 Lockton Lane, Mission, Kansas
Justus, Mrs. John B., 5221 Howe Dr. 3
Kantor, Mrs. Julius M., 6708 High Dr. 15
Kantor, Mrs. Samuel, 209 Brush Creek 12
Kartus, Mrs. Irving, 2608 W. 67th St., Prairie Village 15, Kansas
Katz, Mrs. Milton, 2306 W. 78th St. 15
Kaul, Mrs. Philip G., 5539 Canterbury Rd. 3
Keeler, Mrs. James E., 651 W. 57th St. 13
Kells, Mrs. William A., 1408 Little, Grandview
Kennard, Mrs. G. Keith, 6109 Buena Vista, Mission, Kansas
Kent, Mrs. Bela, 5839 Cherokee, Mission, Kansas
Kepner, Mrs. John W., 3425 Holmes 9
Kerr, Mrs. Russell, 5938 Blue Hills Rd. 10
Ketcham, Mrs. William M., 1205 W. 67th St. 13
Kettner, Mrs. Edward J., 6510 Milhaven Dr., Mission, Kansas

Kienberger, Mrs. Paul A., 3711 Northern Blvd., Independence
Kiene, Mrs. Richard H., 5835 High Dr. 15
Kimball, Mrs. Merritt H., 610 E. 36th St. 9
Kirkpatrick, Mrs. Milton E., 4711 W. 65th St., Mission, Kansas
Kiser, Mrs. David M., 9920 El Monte Lane, Overland Park, Kansas
Kitchen, Mrs. William M., 1209 W. 58th St. 13
Klein, Mrs. E. H., 7011 Roe Blvd., Prairie Village 15, Kansas
Knight, Mrs. John Swann, 5800 High Dr. 15
Knight, Mrs. Lyle B., 108 Madison Lane, Lee's Summit
Knoch, Mrs. H. Kermit, 6606 Willow Lane 15
Koehler, Mrs. Charles A., 4834 Holly 2
Kohn, Mrs. Cecil M., 4618 Warwick 12
Korth, Mrs. William M., 6615 Overhill Rd. 15
Kranson, Mrs. Seymour J., 11 Hawthorne Pl., Independence
Kyger, Mrs. Fred B., 637 W. 67th Terr. 13
Lacy, Mrs. N. Eugene, 445 W. 68th Terr. 13
Lally, Mrs. James J., 800 W. 52nd Terr. 12
Lamar, Mrs. Frederick C., 323 Brush Creek Blvd. 12
Lamar, Mrs. Robert F., 800 W. 53rd Terr. 12
Lapp, Mrs. Harry C., 1610 Meadow Lake Terr. 13
Latham, Mrs. Raymond W., 3008 W. 67th Terr., Prairie Village 15, Kansas
Laughlin, Mrs. E. O., Chatham Hotel, 3701 Broadway 11
Layton, Mrs. Ira C., 1025 Greenway Terr.
Leifer, Mrs. William W., 201 W. 70th St. 13
Leitch, Mrs. Cecil G., Rt. 2, Box 222, Blue Springs
Leitz, Mrs. Frank B., 6832 Locust 10
Lemoine, Mrs. Albert N., Sr., 9200 High Dr. 15
Leo, Mrs. William A., 7475 Village Dr., Prairie Village 15, Kansas
Lewis, Mrs. Revis C., 1001 W. 56th St. 13
Lichtor, Mrs. Alexander, 5436 Neosho 3
Lichtor, Mrs. Joseph M., 455 E. 80th Terr. 10
Lieberman, Mrs. B. Albert, 229 Ward Pkwy. 12
Lieberman, Mrs. B. Albert, Jr., 424 W. 70th St., 13
Liersch, Mrs. Joseph, 815 E. Gregory Blvd. 31
Lilly, Mrs. Terry E., Jr., 2117 W. 50th St. 12
Lindquist, Mrs. Carl N., 6437 Hodges Dr., Mission, Kansas
Link, Mrs. Vance E., 1201 W. 36th St., Independence
Long, Mrs. R. Stacy, 3343 Blue Ridge Blvd., Independence
Love, Mrs. D. M., 613 E. 66th St. 10
Lowell, Mrs. Paul, 711 W. 46th St. 12
Lyddon, Mrs. Harold R., 1221 W. 67th St. 13
Lytton, Mrs. George J., 3408 W. 79th St.
MacNaughton, Mrs. Robert A., 6119 W. 76th St. 15
Major, Mrs. Hermon S., 3100 Euclid 9
Makous, Mrs. Norman, 1629 Drumm Ave., Independence
Mangels, Mrs. Kenneth A., 703 Queen Ridge Dr., Independence
Mantz, Mrs. Frank, Jr., 8905 Pawnee Lane, Prairie Village 15, Kansas
Mantz, Mrs. Herbert L., 1209 Romany Rd. 13
Marks, Mrs. Mark M., 6537 Summit
Marshall, Mrs. Cameron F., 2500 W. 65th St. 15
May, Mrs. James W., 3501 W. 63rd St. 15
Mayer, Mrs. John H., Jr., 829 W. 55th St. 13
McCanse, Mrs. Raymond, 411 W. 50th St. 12
McClanahan, Mrs. Robert C., 6456 Overbrook Rd. 15
McConchie, Mrs. James E., 2719 S. Chrysler, Independence
McCoy, Mrs. Fred, 5720 Foster, Merriam, Kansas
McCubbin, Mrs. Clarence R., 53 Janssen Pl. 9
McCullough, Mrs. Campbell C., Jr., 6424 Aberdeen Rd. 15
McCunniff, Mrs. William B., 3719 Jarboe 11
McDonald, Mrs. Victor G., 5433 Mission Rd., Kansas City 3, Kansas
McDonnell, Mrs. John F., 5411 Central 12
McFarland, Mrs. M. Donald, 5830 High Dr. 15
McGannon, Mrs. Paul T., 5311 Chadwick 3
McHale, Mrs. Thomas C., 3003 W. 90 Terr. 15
McKee, Mrs. Joseph W., Stanley, Kansas
McKee, Mrs. Wallace P., 3415 W. 74 Terr., Prairie Village 15, Kansas
McLeod, Mrs. John, 9 E. 67th St. 13
McMillan, Mrs. Thomas E., 3409 W. 68th St. 15
McVay, Mrs. James R., 856 W. 62nd
McVay, Mrs. James R., 1015 Huntington Rd. 13
Melgaard, Mrs. S. Ross, 6831 Cherry 10
Meyer, Mrs. Paul W., 31 E. 68th Terr. 13
Meyers, Mrs. Harold L., 5925 Cherokee Dr., Mission, Kansas
Miles, Mrs. George O., 2231 W. 63rd St. 15
Miller, Mrs. Clint L., 201 Madison, Lee's Summit
Miller, Mrs. Gerald L., 836 W. 51st St. 12
Miller, Mrs. Wade H., 16 E. 54th St. 12
Miller, Mrs. Wilson H., 6400 Verona Rd. 15
Mitchell, Mrs. Andrew, 2500 Tomahawk Rd. 15
Mixson, Mrs. William C., 6501 Sagamore Rd. 15
Montgomery, Mrs. James G., 5049 Wornall Rd. 12
Mooney, Mrs. Justin L., 5717 Windsor Dr., Mission, Kansas
Mooney, Mrs. Marcel L., 6439 Ensley Lane
Morgan, Mrs. David B., 6513 Jefferson 13
Moriarty, Mrs. Lauren R., 1239 W. 61st Terr. 13
Morrow, Mrs. Raymond L., 17 W. 69th St. 13
Moss, Mrs. Paul, 420 E. 64th Terr. 10
Mosser, Mrs. Robert S., 3114 S. Norton, Independence
Mueller, Mrs. Martin J., 6441 Holmes 10
Mullen, Mrs. Leo M., 4443 Paseo 10
Murphy, Mrs. Edward S., 836 W. 62nd St. 13
Murphy, Mrs. Robert J., 6428 High Dr. 15
Myers, Mrs. J. S., 5401 W. 65th Pl., Mission, Kansas
Myers, Mrs. Robert M., 804 W. 65th St. 13
Myers, Mrs. Wilson A., 425 Huntington Rd. 13
Needels, Mrs. Orval T., 207 W. 67th Terr. 13
Nelson, Mrs. Bentley A., 6842 Cherry 10
Nesselrode, Mrs. John H., 3510 S. McCoy St., Independence
Nickson, Mrs. Charles E., Jr., 4425 Larson 33
Nicolay, Mrs. Kenneth, 4049 Brookridge Dr., Mission, Kansas
Nigro, Mrs. Robert, 834 W. 61st Terr. 13
Noltensmeyer, Mrs. Milton, 3305 W. 50th Terr., Kansas City 3, Kansas
Nunn, Mrs. P. M., 3418 Karnes Blvd. 11
O'Brien, Mrs. Leo A., 5401 Wyandotte 12
O'Hearne, Mrs. John J., 5529 High Dr. 15
O'Neil, Mrs. James H., 6729 Rockhill Rd. 10
Overesch, Mrs. Harry B., 6215 Ensley Lane 15
Owens, Mrs. Graham J., 3700 W. 64th St. 15
Owens, Mrs. Richard L., 6619 Edgevale Rd. 13
Ozar, Mrs. Milton B., 109 E. Dartmouth Rd. 13
Padfield, Mrs. Earl G., 1900 W. 61st Terr.
Padgett, Mrs. Earl C., 6501 Jefferson 13
Pakula, Mrs. Sidney, 5225 Charlotte 10
Pallett, Mrs. Harold A., 4618 Warwick 12
Parker, Mrs. Hubert M., 1200 W. Red Bridge Rd. 14
Passman, Mrs. Harold, 416 E. 72nd Terr. 10
Patterson, Mrs. John R., 5317 Chadwick, Kansas City 3, Kansas
Pearson, Mrs. Paul, 210 W. 70th Terr. 13
Peete, Mrs. Don Carlos, 3717 Belleview 11
Perll, Mrs. Maurice F., 830 W. 61 Terr. 13
Perry, Mrs. Ralph, 7140 Sni-A-Bar Rd. 29
Peterson, Mrs. Milton C., 3000 W. 67th St.
Petry, Mrs. E. L., 4934 Belinder Rd., Kansas City 3, Kansas
Pfuetze, Mrs. Edwin L., 3105 W. 71st St., Prairie Village 15, Kansas
Piper, Mrs. D. K., 3301 E. Meyer Blvd. 30
Pipkin, Mrs. Garrett, 5427 Baltimore 12
Pollock, Mrs. Leo H., 5235 Rockhill Rd. 10
Porter, Mrs. Louis, 6017 McGee 13
Potter, Mrs. George Lee, 6904 Valley Rd. 13
Powers, Mrs. John M., 3838 Blue Ridge Blvd., Independence
Preston, Mrs. Albert, Jr., 606 W. Meyer Blvd. 13
Printz, Mrs. Joseph H., 820 W. 64th Terr. 13
Pucci, Mrs. Gregory L., 9923 Mercier 14
Pugh, Mrs. Richard, 600 Dickinson Rd., Independence
Quer, Mrs. Erich A., 6820 Tomahawk Rd. 15
Quistgard, Mrs. Paul C., 7300 Manchester 33
Ramey, Mrs. Ehret O., 8907 Belleview 14
Rector, Mrs. Joe Lee, Jr., 5323 Fairway Rd., Kansas City 3, Kansas
Reinhardt, Mrs. G. Robert, 600 66th St. 10
Reister, Mrs. Philip D., 814 W. 74th St. 14
Rhoades, Mrs. Arthur, 110th and Antioch Rd., Lenexa, Kansas
Riller, Mrs. L. E., 3724 Holmes 9
Rinkel, Mrs. Herbert J., 7300 Madison 14
Roberts, Mrs. Harold M., 1005 Brentwood Circle
Roberts, Mrs. Sam E., 5964 Overhill Rd. 15
Robinson, Mrs. Arthur W., 6600 Wenonga Rd. 15
Robinson, Mrs. E. Kip, 1015 W. 58 Terr. 13
Robinson, Mrs. G. Wilse, 2625 W. Paseo 8
Robinson, Mrs. G. Wilse, Jr., Lake Quivera, Kansas City 6, Kansas
Robinson, Mrs. William J., 9931 Lee Circle 15
Robison, Mrs. James Travis, Jr., 600 W. Dartmouth 13
Rubin, Mrs. Sidney, 1287 W. 72nd St. 14
Rubnitz, Mrs. Leon H., 210 W. 84th St., 14
Russell, Mrs. Robert K., 8933 Roseland, Raytown 33
Saferstein, Mrs. A. Lester, 6859 Cherry 10
Samuelson, Mrs. E. A., 1000 W. Gregory Blvd. 14
Sanders, Mrs. Clarence E., 4700 Roanoke Pkwy. 12
Sanders, Mrs. William F., 6419 Wornall Terr. 13
Sauer, Mrs. Gordon C., 5536 Central 13
Saunders, Mrs. E. L., 3839 S. Chrysler, Independence
Schaerrer, Mrs. W. C., 5245 Mercier 12
Schiffmacher, Mrs. Jack E., 4517 W. 65th St., Prairie Village 15, Kansas
Schneider, Mrs. Richard F., 7745 Canterbury 15
Schorer, Mrs. Edwin H., 5049 Wornall Rd. 12
Schottman, Mrs. Gerhard W., Jr., 5902 W. 77 Terr. 15
Schutz, Mrs. Richard B., 3913 W. 57th St. Terr., Mission, Kansas
Seely, Mrs. Clark W., 3000 W. 68th St. 15
Shapiro, Mrs. L. M., 6429 Holmes 10
Shechter, Mrs. Nathan, 5723 Windsor Dr., Mission, Kansas
Shelden, Mrs. Russell D., 816 W. 58th Terr. 13
Shifrin, Mrs. Alexander, 6709 Locust 10
Shireman, Mrs. Kenneth L., 4415 Sunrise Dr. 23
Shuey, Mrs. Herbert H., 933 E. 77 Terr. 10
Shumate, Mrs. D. L., 3703 Penn 11
Shypper, Mrs. Mosea J., 4738 Oak
Simon, Mrs. Sanford, 5000 Oak 12
Sinclair, Mrs. Alexander B., Jr., 211 W. Concord Ave.
Singleton, Mrs. J. Milton, 835 W. 53rd Terr. 12
Skillman, Mrs. Robert K., 7710 W. 77nd Terr., Overland Park, Kansas
Skinner, Mrs. John O., 5108 Grand 12

Skinner, Mrs. John T., 824 Westover Rd. 13
Slentz, Mrs. Edwin L., 4812 W. 66th Terr., Mission, Kansas
Slentz, Mrs. William A., 441 W. 59th St., Terr. 13
Slickman, Mrs. Robert A., 4937 Wyoming
Smith, Mrs. Arthur B., 101st & Holmes Rd. 10
Smith, Mrs. Dale C., 5212 Reinhardt, Kansas City 3, Kansas
Smith, Mrs. Ira T., 3900 W. 90th Terr., Overland Park, Kansas
Smull, Mrs. Ned W., 5321 Falmouth, Kansas City 3, Kansas
Sneid, Mrs. Philip, 4201 W. 90 Terr., Overland Park, Kansas
Snider, Mrs. Sam H., 722 Ward Pkwy. 12
Spafford, Mrs. Allen L., 5552 Belinder Ave., Kansas City 3, Kansas
Stacey, Mrs. Wallace R., 2624 S. Arlington, Independence
Staggs, Mrs. William A., 641 E. 45th St. 10
Staley, Mrs. Harry R., 5028 Sunset Dr. 12
Statland, Mrs. Harry, 421 E. 63rd Terr. 10
Steele, Mrs. James C., 7324 Beverly, Overland Park, Kansas
Steffen, Mrs. L. F., 5521 Crestwood Dr. 10
Stelmach, Mrs. W. Jack, 6100 Morningside Dr. 13
Stockton, Mrs. Raymond W., 5215 W. 81st St., Prairie Vilage 15, Kansas
Stockwell, Mrs. A. Lloyd, 5736 Windsor Dr., Mission, Kansas
Stratemeier, Mrs. Edward H., Jr., 9728 High Dr. 15
Summers, Mrs. Caldwell B., 7312 Jarboe 14
Swisher, Mrs. Robert C., 6034 Lockton Lane, Mission, Kansas
Szabados, Mrs. Ernest D., 1901 Leslie, Independence
Tarson, Mrs. Solomon S., 837 Gregory Blvd. 14
Tasker, Mrs. Charles B., 2721 W. 67th Terr. 15
Teall, Mrs. Raymond E., 650 W. 56th St. 13
Terrill, Mrs. Robert S., 10223 Lee Blvd. 15
Thiele, Mrs. George H., 6526 High Dr. 15
Thiessen, Mrs. Edward H., 6405 Sagamore Rd. 15
Thomas, Mrs. Christopher Y., III, 4206 Homestead Dr., Prairie Village, Kansas
Thompson, Mrs. Charles L., 1256 W. 61st Terr. 13
Tice, Mrs. Wayne K., 1915 Lake Dr., Independence
Tiemann, Mrs. Theodore G., 3336 Summit 11
Trimble, Mrs. William K., 6020 McGee 13
Trippe, Mrs. Harrison C., 8511 Lee Blvd. 15
Trowbridge, Mrs. Barnard C., 2411 W. 65th St. 15
Trowbridge, Mrs. E. H., Jr., 6436 High Dr. 15
Twin, Mrs. Edward, 2921 W. 67th Terr. 15
Twyman, Mrs. Richard A., 1020 W. 56th St. 13
Underwood, Mrs. Dick H., 2008 W. 95th St. 15
Underwood, Mrs. Ross H., 5522 Aberdeen Rd., Kansas City 3, Kansas
Unger, Mrs. Harold, 400 W. 68th St. 13
Valentine, Mrs. Herbert S., 1020 W. 69th St. 13
Van Biber, Mrs. James T., 3705 Northern Blvd., Independence
Van Buskirk, Mrs. William C., 432 W. Gregory Blvd. 14
VanDel, Mrs. Dwight T., 6737 Rockhill Rd. 10
Vilmer, Mrs. Charles E., 3016 W. 67th St. 15
Vincent, Mrs. Jack C., 2003 W. 67th Terr. 15
Virden, Mrs. Herbert H., 6533 High Dr.
Voth, Mrs. Harold W., 5413 Neosho, Kansas City 3, Kansas
Wade, Mrs. Frederick E., 6421 Wornall Terr.
Wakefield, Mrs. F. H., 8352 Overbrook Rd. 15
Walker, Mrs. James C., 609 E. 96th St.
Walker, Mrs. John W., 8320 Ensley Lane 15
Wall, Mrs. Harry C., 6000 Howe Dr., Mission, Kansas
Wall, Mrs. Leonard A., 5011 Neosho, Kansas City 3, Kansas
Walthall, Mrs. Damon O., 6439 Jefferson 13
Webster, Mrs. Joseph G., 5532 Locust St.
Weiford, Mrs. Edward C., 2009 W. 68th St.
Welker, Mrs. Joseph E., 6441 Summit 13
Weltscheff, Mrs. Christo A., 2211 W. 71st St. 15
Wheeler, Mrs. Charles B., Jr., 820 W. 57th St. 13
Wheeler, Mrs. John H., 5650 Mission Dr.
White, Mrs. Charles, 4125 Brookridge Dr., Mission, Kansas
White, Mrs. Stoughton F., 6815 Cherokee Lane 15
White, Mrs. William, 613 W. 57th Terr. 13
Whiteman, Mrs. John R., 9729 Cherokee Lane 15
Whitman, Mrs. Doyle C., 6836 Cherokee Lane 15
Whitmore, Mrs. J. Stewart, 8816 Fairway 15
Wien, Mrs. Irving A., 515 E. 78th St. 10
Wilhelm, Mrs. Francis E., 5331 Norwood Rd., Kansas City 3, Kansas
Wilhelm, Mrs. Warren F., 3100 W. 67th St. 15
Wilkinson, Mrs. E. A., 2300 W. 69th St. 15
Williams, Mrs. Delon A., 1252 Stratford Rd. 13
Williams, Mrs. Joseph C., Jr., 1231 W. 69th St. 13
Williams, Mrs. Roland Dean, 5320 Norwood, Kansas City 3, Kansas
Williams, Vincent T., 4400 Blue Ridge Blvd. 33
Willits, Mrs. Lyle G., 1224 W. 62nd St. 13
Willoughby, Mrs. Jean B., 1019 W. 69th Terr. 13
Wilson, Mrs. Brickhouse, 700 Ward Pkwy. 12
Wilson, Mrs. Clifford C., 5531 Neosho Lane, Kansas City 3, Kansas
Winer, Mrs. Herbert J., 7450 Beverly, Overland Park, Kansas
Winston, Mrs. Bernard H., 1006 W. 67th St. 13
Wise, Mrs. George W., 4610 Homestead Dr., Prairie Village 15, Kansas
Wolf, Mrs. Jack W., 6125 Morningside Dr. 13
Wood, Mrs. Lawrence E., Wood Hill Farm, R. R. 1, Stilwell, Kansas
Wortmann, Mrs. Robert, 2819 W. 66th Terr. 15
Wright, Mrs. Paul R., 4902 Belinder Ave., Kansas City 3, Kansas
Wu, Mrs. William, 4414 Homestead Dr., Prairie Village 15, Kansas
Young, Mrs. James E., 9817 Lee Circle 15
Zellermayer, Mrs. Jacob, 5801 Lockton Lane, Mission, Kansas
Ziegler, Mrs. Dewey K., 8347 Delmar Lane 15
Zoglin, Mrs. Nathan, 5901 Wyandotte 13
Zuber, Mrs. Harold V., 6800 Cherokee Lane 15

JASPER COUNTY
(Joplin)

Allen, Mrs. David O., 505 W. 34th
Barlow, Mrs. Donal, c/o R. M. Stormont, Webb City
Barnett, Mrs. Norman, Rt. 3, Box 190-H, Tabor Woods
Birsner, Mrs. Frank, 1717 River, Carthage
Black, Mrs. Mervin H., 615 Hampton Pl.
Blanke, Mrs. Otto E., 2505 E. 14th
Burch, Mrs. John E., 1345 Crest Dr.
Chenoweth, Mrs. Albert, 320 Moffet
Chesney, Mrs. George W., 2416 E. 12th
Cohle, Mrs. Richard, 1609 Lilac Lane, Carthage
Craig, Mrs. Irwin T., 2525 E. 12th
Crawford, Mrs. A. L., 2931 Pearl
Crispell, Mrs. Lawrence S., 911 Kensington
Curl, Mrs. Howard, 102 Moffet
DeTar, Mrs. Burleigh E., Jr., Box 192-A, Rt. 3
DeTar, Mrs. Burleigh E., Sr., Duquesne Rd.
DeTar, Mrs. George, 2718 Connor
Dilday, Mrs. Thomas F., 230 N. Moffet
Ferguson, Mrs. Lewis H., 3102 Minnesota
Ferguson, Mrs. Ralph L., 420 E. 33rd
Ferguson, Mrs. Robert M., 903 S. Madison, Webb City
Graves, Mrs. F. Burton, Rt. 4, Box 491
Hamilton, Mrs. Eugene H., 615 N. Pearl
Holtzman, Mrs. Samuel, 108 Sergeant
Hornback, Mrs. Edward R., 2609 E. 12th
Isbell, Mrs. C. H., 1046 S. Garrison, Carthage
Jeans, Mrs. Virgil, 629 Islington
Kenney, Mrs. V. E., 728 Chestnut
Koehler, Mrs. John W., 3010 Wall
Longenecker, Mrs. Joe L., 612 N. Byers
Maddox, Mrs. John D., 528 Pearl
McIntire, Mrs. Emery, 1803 S. Maple, Carthage
McNew, Mrs. W. T., 1204 S. Main, Carthage
McPike, Mrs. Lloyd H., 3317 Oak Ridge
Meares, Mrs. Cecil H., Rt. 4, Box 497
Myers, Mrs. Roy E., 623 Sergeant
Papp, Mrs. Sandor D., 3343 Pearl
Patterson, Mrs. Donald R., Holly Hills
Patterson, Mrs. Grover S., 1944 S. Main, Carthage
Post, Mrs. Winfred L., 2630 E. 15th
Reid, Mrs. Charles T., 614 Hampton Pl.
Schoeberl, Mrs. C. B., 3111 E. 4th
Schulte, Mrs. Gregory A., 2515 E. 12th
Scorse, Mrs. Sidney W., 619 W. 2nd
Simmons, Mrs. Leroy, Sarcoxie
Smith, Mrs. Roland T., 426 N. Pearl
Smith, Mrs. Russell W., 315 Euclid, Carthage
Stormont, Mrs. Riley M., 26 S. Webb, Webb City
Walker, Mrs. Paul W., 1022 N. Sergeant
Wetzel, Mrs. Fred S., 1503 S. Garrison, Carthage
Wieman, Mrs. Harry K., 536 N. Wall
Wood, Mrs. George H., 530 E. Highland, Carthage
Wooldridge, Mrs. Bart F., 701 N. Pearl
Wright, Mrs. George W., 222 S. Webb, Webb City
Young, Mrs. Clyde C., 2518 Markwardt

JEFFERSON COUNTY

Allbee, Mrs. Roger H., Box 146, Crystal City
Bolgar, Mrs. Bertalan, 228 N. Adams St., Festus
Donnell, Mrs. R. H., Crystal Heights, Crystal City
Donnell, Mrs. Thomas, DeSoto
Fallet, Mrs. Charles, DeSoto
Kozal, Mrs. F. L., Oak's Dr., Crystal City
Mayfield, Mrs. J. L., Crystal Hts., Crystal City
McKinstry, Mrs. Karl, DeSoto
Rutledge, Mrs. John, 409 Mississippi Ave., Crystal City
Senn, Mrs. Emmett J., Herculaneum
Sum, Mrs. O. J., Kimmswick

JOHNSON COUNTY
(Warrensburg)

Cooper, Mrs. R. Lee, 411 W. Gay
Damron, Mrs. Oscar H., 612 N. Maguire
Gonzalez, Mrs. Mario Garza, 204 Grover
Harkness, Mrs. Harry H., Burkarth Rd.
Johnson, Mrs. Charles S., 821 S. Maguire
Jonds, Mrs. Keith D., 910 E. Clark
Lederer, Mrs. Charles M., 617 Clark
Maxson, Mrs. T. Reed, Arilen Acres

LAFAYETTE-RAY COUNTIES

Best, Mrs. Robert, Higginsville
Brady, Mrs. Hugh, Concordia
Brasher, Mrs. Ben H., Lexington
Cook, Mrs. Edna, Richmond
Cook, Mrs. Thomas B., Richmond
Cope, Mrs. Joseph S., Lexington
Crozier, Mrs. Frank, Richmond
Devault, Mrs. George, Richmond
Fulkerson, Mrs. Wilbur E., Higginsville
Johnson, Mrs. Myron C., Richmond
Johnston, Mrs. E. L., Concordia
Kelling, Mrs. Douglas, Waverly
Kelling, Mrs. George, Waverly
Kelling, Mrs. Jordan, Waverly
Koppenbrink, Mrs. W. E., Jr., Higginsville
Koppenbrink, Mrs. W. E., Sr., Higginsville
Liston, Mrs. Otis, Oak Grove
Martin, Mrs. Wilfred E., Odessa
Riley, Mrs. Ralph, Lexington
Ward, Mrs. Joe W., 1004 Frances, Lexington
Williams, Mrs. John W., Oak Grove

MEMBER-AT-LARGE

Bareis, Mrs. Robert, 408 N. Locust, Marshfield
Barnett, Mrs. C. H., 123 E. Locust, Bolivar
Biggs, Mrs. Fred J., Jr., 808 N. Main St., Poplar Bluff
Blackwell, Mrs. Charles W., Platte City
Bozzo, Mrs. Raymond J., 408 W. 2nd St., Washington
Brenner, Mrs. Paul A., Owensville
Comeau, Mrs. R. A., Dexter
Davis, Mrs. W. L., Charleston
Denny, Mrs. Hubert M., 610 E. State, Union
Finney, Mrs. W. O., Chaffee
Fleming, Mrs. J. Will, Jr., 1 Windsor Pl., Moberly
Fleming, Mrs. Thomas S., 517 Fort St., Moberly
Hoelscher, Mrs. Harold F., Warrenton
Macdonnell, Mrs. T. M., Marshfield
McGraw, Mrs. Doyle, 711 N. Main Ave., Bolivar
McNeel, Mrs. Lee Al, Jr., Valley View Angus Farms, Greenfield
Muench, Mrs. Ludwig O., 1530 Riverview Dr., Washington
Netherton, Mrs. George F., 312 E. 3rd, Cameron
Parker, Mrs. H. Graham, Platte City
Post, Mrs. John P., Grand Ave., Washington
Power, Mrs. John A., 315 N. Pine St., Harrison, Arkansas
Ritterbusch, Mrs. James K., State Hosp. 1, Fulton
Schmidt, Mrs. Herbert H., Marthasville
Smith, Mrs. William J., 206 Phelps, Windsor
Steinbeck, Mrs. Herbert D., Union
Strehlmann, Mrs. Ben G., Union
Wilson, Mrs. John E., Platte City

MARION COUNTY
(Hannibal)

Back, Mrs. Lysle N., 1737 Harrison Hill
Burns, Mrs. Francis R., 2903 Hill
Canella, Mrs. John, 116 S. 7th
Francka, Mrs. W. F., 602 Country Club Dr.
Glascock, Mrs. Donald W., 1501 S. Main, Palmyra
Greene, Mrs. Harry, 1940 Harrison Hill
Hamlin, Mrs. Wyeth H., 3405 St. Marys
Hornback, Mrs. George A., 520 N. Hawkins
Landau, Mrs. Daniel B., 2901 Pleasant
Lanning, Mrs. Robert J., 7 Cardiff Dr.
Levine, Mrs. Ervine, Vandalia
Lucke, Mrs. E. M., 2601 Hubbard
Purcell, Mrs. Paul, Hull, Illinois
Rapp, Mrs. Earl L., 19 Holliday
Roller, Mrs. Merrill H., 1000 Country Club Dr.
Smith, Mrs. W. J., 2101 St. Marys
Strong, Mrs. Richard M., 313 Virginia
Sultzman, Mrs. Francis E., 1 Cardiff Lane
Sweets, Mrs. Henry H., Jr., 207 N. 6th
Walterscheid, Mrs. John H., 12 Riverpoint
Well, Mrs. Julius W., Palmyra

MID-MISSOURI COUNTIES
(Phelps-Crawford-Dent-Pulaski-Maries-Laclede Counties)

Bauman, Mrs. A. R., Steelville
Breuer, Mrs. R. E., 907 W. 12th St., Rolla
Butts, Mrs. James D., 100 Adrian, Rolla
Carrington, Mrs. H. W., 105 Bennett, Lebanon
Crider, Mrs. Clara, Dixon
Davis, Mrs. H. H., 616 Salem Ave., Rolla
Fisher, Mrs. George E., 545 N. Jefferson, Lebanon
Froelich, Mrs. Rae W., 1345 W. Madison, Lebanon
Jorel, Mrs. Louis E., 158 N. Adams, Lebanon
Lytle, Mrs. W. R., 1100 Duane, Rolla
Myers, Mrs. James M., 1016 W. 12th St., Rolla
Stricker, Mrs. E. A., St. James
Summers, Mrs. Jacob H., Highway 64, Lebanon
Underwood, Mrs. M. K., 1811 Vichy Rd., Rolla

MILLER-MORGAN-MONITEAU COUNTIES

Buehler, Mrs. Carl T., Jr., Eldon
Burke, Mrs. J. P., California
Fulks, Mrs. Richard B., California
Gallagher, Mrs. Lionel M., California
Gunn, Mrs. Jack, Versailles
Kibbee, Mrs. E. A., California
Latham, Mrs. Kenyon, California
Lyle, Mrs. Ray, Versailles
Shelton, Mrs. E. O., Eldon
Washburn, Mrs. J. L., Versailles

MINERAL AREA
(St. Francois-Iron-Madison-Washington-Reynolds-Ste. Genevieve Counties)

Appleberry, Mrs. Charles H., 706 W. Main, Flat River
Appleberry, Mrs. Reuben, 815 W. Columbia, Farmington
Bull, Mrs. Ben, 109 S. Knob St., Ironton
Carleton, Mrs. Charles E., Jr., 501 Center, Farmington
Chastain, Mrs. C. W., 30 Tanglewood, Farmington
Cresswell, Mrs. George F., Potosi
Crouch, Mrs. Richard F., 714 Ste. Genevieve, Farmington
Dennis, Mrs. Paul, 709 Tyler, Flat River
Evans, Mrs. Albert L., 113 Benham, Bonne Terre
Gaebe, Mrs. Harold C., Desloge
Grossman, Mrs. Marvin, 500 Marshall, Fredericktown
Haw, Mrs. Marvin T., Jr., 207 Fite, Bonne Terre
Huckstep, Mrs. Robert A., 43 Pine, Farmington
Hunt, Mrs. John W., Jr., 110 Bell, Leadwood
Jones, Mrs. Paul L., 6 Bennett, Flat River
Karraker, Mrs. Alvan G., 507 North St., Farmington
Mullen, Mrs. Jack, Rt. 2, Bonne Terre
Oliver, Mrs. George, 117 Oak Hill Downs, Farmington
Roebber, Mrs. H. M., 203 Branch, Bonne Terre
Taylor, Mrs. Van W., 54 Church, Bonne Terre
Watkins, Mrs. George L., 813 Dewey, Farmington
Watkins, Mrs. George L., Jr., 812 Dewey, Farmington
Yeargain, Mrs. John P., Irondale

NODAWAY-HOLT-ATCHISON-GENTRY-WORTH COUNTIES

Allen, Mrs. James, Rockport
Bare, Mrs. E. F., Tarkio
Bauman, Mrs. Henry C., 921 W. 3rd, Maryville
Byland, Mrs. Ben, R.F.D., Maryville
Carlin, Mrs. Albert, Stanberry
Carpenter, Mrs. Wallace, Rockport
Cossins, Mrs. C. E., State Hospital 2, St. Joseph
Dean, Mrs. L. E., 121 E. Edwards, Maryville
Dunshee, Mrs. Robert E., 215 W. Edwards, Maryville
Humberd, Mrs. May, Barnard
Kirk, Mrs. C. W., Hopkins
Niedermeyer, Mrs. E. L., Tarkio
Settle, Mrs. Emmett, Tarkio
Wempe, Mrs. G. R., 940 W. 2nd, Maryville

OZARK COUNTIES
(Barry-Lawrence-Stone-Christian-Tancy-Newton-McDonald Counties)

Anderson, Mrs. Paul B., 246 Hillcrest, Neosho
Bailey, Mrs. Alan, Mount Vernon
Blankenship, Mrs. George W., Box 449, Rt. 3, Neosho
Bowman, Mrs. Melvin C., Highway 71 South, Neosho
Brasher, Mrs. Charles A., Mount Vernon
Brown, Mrs. Frederick B., Aurora
Carter, Mrs. James R., 718 Oak Ridge Dr., Neosho
Donley, Mrs. Robert R., 617 W. Cleveland, Monett
Edwards, Mrs. Francis L., 510 Grand Ave., Monett
Ferguson, Mrs. Lewis H., 309 Frisco, Monett
Glass, Mrs. William J., 402 Grand, Monett
Glover, Mrs. Kenneth, 801 S. Market, Mount Vernon
Graves, Mrs. Arthur J., 103 Roberts Dr., Mount Vernon
Hobbs, Mrs. George H., Mount Vernon
Keeney, Mrs. R. E., Neosho
Kerr, Mrs. Frank T., 511 W. Cleveland, Monett
Langeluttig, Mrs. Harry V., 529 Kirby, Mount Vernon
Lentz, Mrs. H. C., 605 Highland Pl., Neosho
Maples, Mrs. Floyd H., Mount Vernon
McCallum, Mrs. A. J. C., 404 Lincoln, Aurora
Olive, Mrs. George C., 514 W. Hickory, Neosho
Price, Mrs. Charles H., Cassville
Royce, Mrs. J. J., Noel
Taylor, Mrs. Leo T., Highway 71 South, Neosho
Whitehead, Mrs. Frank F., Box 270, Neosho
Wommack, Mrs. Fred L., Crane
Yates, Mrs. J. Lewis, Mount Vernon

PERRY COUNTY

Bailey, Mrs. William H., 104 N. Pine, Perryville
Blaylock, Mrs. George A., 308 W. Ste. Maries, Perryville
Bredall, Mrs. Jerome J., Wild Acres, Perryville
Carron, Mrs. Oscar A., 208 N. Waters, Perryville
DeGenova, Mrs. Gerard H., 1280 Ridgeway Dr., Ste. Genevieve
de la Tejera, Mrs. Ralph, Perryville
Fairchild, Mrs. James F., 36 S. Moulton, Perryville
Feltz, Mrs. Lawrence W., 20 S. Feltz, Perryville
Legner, Mrs. Stanley G., 201 State, Perryville
Lutkewitte, Mrs. Joseph F., Box 58, St. Marys
McDermott, Mrs. Alfred E., Perryville
Utterman, Mrs. William F., 614 S. Main, Perryville

PETTIS COUNTY
(Sedalia)

Beckmeyer, Mrs. W. A., 719 W. 4th St.
Bess, Mrs. William E., 1600 W. 10th St.
Bishop, Mrs. William T., 616 W. 6th St.
Boger, Mrs. John W., 2803 Skyline Dr.
Bohling, Mrs. Cord, 1500 S. Kentucky
Brady, Mrs. Charles H., 720 W. 5th St.
Campbell, Mrs. Albert J., 1917 W. 10th St.
Campbell, Mrs. Albert J., Sr., 319 E. Broadway
Dyer, Mrs. D. P., 2511 Stephenson Ave.
Edwards, Mrs. David R., 1619 S. Moniteau
Fisher, Mrs. Stanley D., 2403 Greenwood Lane
Gonser, Mrs. Karl B., 1619 W. Broadway
Hite, Mrs. H. A., Greenridge
Hopkins, Mrs. G. G., 524 S. Grand
Hopkins, Mrs. Thomas J., 1506 W. Broadway
Lamy, Mrs. John E., 509 W. Broadway
Lemire, Mrs. Robert W., 1814 W. 11th St.
Long, Mrs. Frank B., 723 W. 7th St.
Love, Mrs. J. G., 612 S. Kentucky
Lowe, Mrs. Alvin L., R. R. 4
Marty, Mrs. L. A., 2308 S. Kentucky
Mitchell, Mrs. John E., Broadway Arms
Osborne, Mrs. Charles D., 710 W. Broadway
Proctor, Mrs. Donald C., 908 W. Broadway
Shy, Mrs. Milton P., 1023 W. 7th
Siegel, Mrs. Carl D., 810 S. Barrett
Siegel, Mrs. Peter V., Smithton
Snavely, Mrs. E. C., 908 S. Grand
Stauffacher, Mrs. Gordon C., 1313 W. Broadway
Stewart, Mrs. Robert H., 1815 W. 10th St.
Trader, Miss Frances W., 219 W. 7th St.
Walter, Mrs. A. L., 1000 W. 7th St.
Yancey, Mrs. Edwin F., 803 W. Broadway

SALINE COUNTY
(Marshall)

Aiken, Mrs. Richard F., 110 N. Brunswick
Blalock, Mrs. Robert W., 1380 S. Salt Pond
Bowdish, Mrs. Palmer R., 604 E. Yerby
Haynes, Mrs. Robert C., 754 E. Eastwood
Knipschild, Mrs. B. F., 680 E. Summit
Lawrence, Mrs. John R., Arrow Rock
McMurney, Mrs. C. A., Slater
McCorkle, Mrs. E. Lee, 791 E. Eastwood
Reid, Mrs. James A., 102 E. Rea
Roberts, Mrs. P. A., Sweet Springs
Roehrs, Mrs. Marvin E., 756 E. Eastwood
Simmons, Mrs. S. P., 934 S. Lafayette
Worley, Mrs. C. A., Sweet Springs

ST. LOUIS CITY
(St. Louis)

Ahlering, Mrs. George H., 7129 Lindell Blvd. 30
Allen, Mrs. Willard M., 417 Conway 24
Altheide, Mrs. J. Paul, 4605 Lindell Blvd. 8
Alvis, Mrs. B. Y., 7011 Washington 30
Arneson, Mrs. A. N., 6314 Waterman 30
Bartlett, Mrs. Robert, 11 Washington Terr. 12
Bartlett, Mrs. Willard, Sr., 53 Westmoreland 8
Bartlett, Mrs. Willard, Jr., 6345 Ellenwood 5
Bartnick, Mrs. Mitchell L., 3895 Holly Hills 16
Bassett, Mrs. R. B., 2 Beverly Pl. 12
Becke, Mrs. William G., 18 Lorenzo Lane 24
Beckette, Mrs. Edmund S., 7475 York 5
Bell, Mrs. Robert M., 35 Glen Road 19
Benjamin, Mrs. Durand, 7340 Navarre Circle 23
Berg, Mrs. Ralph, 8064 Watkins Dr. 24
Berkman, Mrs. Hugo G., 2920 Moniteau Dr. 21
Berland, Mrs. Harry I., 29 Granada Way 24
Bilsky, Mrs. Nathan, 7840 Lafon Pl. 30
Bindeutel, Mrs. A. H., 3953 Holly Hills 16
Boedeker, Mrs. Roy V., 2909 Bellerive Dr. 21
Boemer, Mrs. Lilburn C., 49 Clermont Lane 24
Bohrer, Mrs. Harry C., 4112 Flora Pl. 10
Bond, Mrs. Y. H., 339 N. Taylor 8
Bondurant, Mrs. Bryce H., 153 Huntleigh Dr. 22
Bosse, Mrs. Edwin H., 6906 Washington Ave. 5
Bowdern, Mrs. Edward H., 2 Berkshires 17
Bowersox, Mrs. Warren, 12 Daniel Rd. 24
Boyd, Mrs. Arthur M., 6556 Delor Ave. 9
Bradley, Mrs. Frank R., 7404 Oxford Dr. 5
Bradley, Mrs. John Martin, 245 N. Union 8
Brown, Mrs. Clyde O., 7419 York Dr. 5
Brown, Mrs. E. Eugene, 379 N. Taylor 8
Brown, Mrs. James Barrett, 4 N. Kingshighway 8
Brown, Mrs. Seymour, 2 Ricardo Lane 24
Budd, Mrs. John J., Jr., 6144 McPherson 12
Burroughs, Mrs. W. H., 7327 Pershing 30
Byrne, Mrs. John Edward, 5878 Delor 9
Calkins, Mrs. Delevan, Rt. 2, Schulte Rd., Creve Coeur
Cameron, Mrs. Solon, 43 Washington Terr. 12
Campos, Mrs. Francisco J., 8201 Balson Ave. 30
Cannon, Mrs. Edward M., 20 Briarcliff 24
Cannon, Mrs. William J., 9335 White Ave. 17
Cappel, Mrs. Powell B., 27 Old Westbury Lane 19
Carley, Mrs. Harry D., 666 Langton Dr. 24
Carney, Mrs. Joseph E., 6625 Pernod Ave. 9
Carroll, Mrs. George A., 7831 Delmar 30
Cassidy, Mrs. Leslie D., 7410 Oxford 5
Chamness, Mrs. James T., 3 Town and Country 24
Cherre, Mrs. Charles J., 10 Haddington Court 24
Ciapciak, Mrs. Stanley J., 30 Log Cabin Dr. 24
Collodi, Mrs. George A., 20 Southcote Rd. 17
Conrad, Mrs. A. H., 9 Dromara, Rd. 24
Conrad, Mrs. Marshall B., 8542 Colonial Lane 24
Cook, Mrs. Ralph, 7135 Kingsbury 30
Cooper, Mrs. Henry T., 5962 Hilgard Pl. 9
Cooper, Mrs. Thomas J., 30 Beverly Dr. 24
Correnti, Mrs. Nicholas A., 6617 Itaska 9
Costa, Mrs. Dominic V., 10 Devondale Lane 31
Costello, Mrs. Joseph P., 30 Arundel Pl. 5
Costello, Mrs. Joseph P., Jr., 57 Berkshire 17
Crossman, Mrs. Robert W., 1509 Holly Dr. 19
Daake, Mrs. John W., 48 Portland Pl. 8
Dalton, Mrs. Arthur R., Conway & Mason Rd. 24
Diehr, Mrs. Alvin H., 29 Rio Vista 24
Dodd, Mrs. Robert B., 32 Jefferson Rd. 19
Doubek, Mrs. John Charles, High Ridge
Doyle, Mrs Charles R., 28 Kingsbury 12
Doyle, Mrs. William J., 4929 McPherson 8
Drake, Mrs Truman G., 6344 Alexander 5
Drews, Mrs. Leslie C., 43 Hillvale Dr. 5
Dreyer, Mrs. Carl Joseph, 204 Kingsville Court 19
Dripps, Mrs. Roy C., 5210 Jamieson 9
Dunham, Mrs. Richard B., 5 Hortense Pl. 8
Eades, Mrs. D. W., 6 Kingsbury Pl. 12
Earp, Mrs. Ralph K., 12 Brookside 24
Eber, Mrs. Carl T., 7 Ladue Meadows 24
Edwards, Mrs. Joseph C., 610 W. Polo Dr. 5
Eigel, Mrs. Edwin G., 3654 Flora Pl. 10
Elliott, Mrs. Gladden, 1016 Winwood Dr. 24
Engman, Mrs. Martin F., Jr., 6445 Cecil 5
Ernst, Mrs. Edwin C., 2 Schultz Rd. 22
Esselbruegge, Mrs. Fred C., 5318 Winona 9
Farley, Mrs. William, 2 Spoede Acres 24
Farrell, Mrs. Robert J., 6906 Roberts Ave. 14
Feller, Mrs. Harold H., 5834 Bermuda Rd. 21
Fish, Mrs. Virgil O., 2500 Town & Country Lane 31
FitzGerald, Mrs. Leo P., 7219 Cornell Ave. 30
Flotte, Mrs. Bernard H., 5428 Clemens Ave. 12
Flotte, Mrs. Sylvester, 9113 Glen Garden 36
Ford, Mrs. Lee T., Jr., 45 Green Acres 37
Franklin, Mrs. Max S., 7536 Buckingham Dr. 5
Fries, Mrs. Armand D., 11 W. Geyer Lane 22
Fries, Mrs. John, 106 Frontenac Forest 31
Gansloser, Mrs. Maxmilian W., 3963 Flora Pl. 10
Gerst, Mrs. Aloysius C., 8700 Riverview 21
Gettinger, Mrs. Andrew J., 5441 Queens Avenue 15
Gissy, Mrs. Carl J., 9999 Litzsinger Rd. 24
Glaser, Mrs. Martin J., 3550 Hawthorne 4
Glick, Mrs. Harry N., Mason Rd., Rt. 13 22
Goldman, Mrs. Melvin L., 8650 Barby Lane 24
Gomez, Mrs. C. A., 18 Havenview 41
Greiner, Mrs. Theodore, 7507 Washington 30
Grogan, Mrs. F. M., 4166 Flora Pl. 10
Grueb, Mrs. Paul M., 6 Grantview Lane 23
Gulick, Mrs. Charles R., 18 Deer Creek Woods 18
Gum, Mrs. William R., 706 Bellerive Blvd. 11
Gundlack, Mrs. Arthur, 8 Alden Lane, Creve Coeur 41
Gunn, Mrs. Walter T., 6742 Itaska 9
Haeberle, Mrs. Frederick S., 3206 Hebert St. 7
Hagebusch, Mrs. Omar E., 16 Covington Lane 32
Hager, Mrs. William F., 4127 Pennsylvania 18
Hall, Mrs. Preston C., 4243 Lafayette 10
Hall, Mrs. Robert A., 43 Washington Terr. 12
Hamilton, Mrs. Eugene G., 59 York Dr. 17
Hammond, Mrs. John J., 7245 Maryland 30
Hampton, Mrs. Stanley F., 93 Lake Forest, 17
Hansel, Mrs. French K., 1609 N. Geyer Rd. 27
Hardesty, Mrs. John F., 7506 Byron Pl. 5
Harkins, Mrs. William Blake, 2005 Brentwood Blvd. 17
Harris, Mrs. Charles, 78 Greendale Dr. 21
Harris, Mrs. Solon P., 7138 Maryland Ave. 30
Harrison, Mrs. Lee B., 44 Ridgemoor Dr. 5
Harting, Mrs. Hugh R., 6330 McPherson 30
Hassett, Mrs. Henry A., 4440 Lindell 8
Hawk, Mrs. Bray O., 3124 Longfellow 4
Haynes, Mrs. Pugh, 8006 Gannon 30
Heinbecker, Mrs. Peter, 4643 Pershing 8
Helbing, Mrs. Harry H., 5475 Cabanne Ave. 12
Henderlite, Mrs. John W., 3 S. Tealbrook Dr. 24
Henschel, Mrs. Eugene V., 5815 Eichelberger St. 9
Hildreth, Mrs. Howard Rommel, 711 Middle Polo Dr. 5
Hollo, Mrs. Vencel W., 5925 Lindell 12
Hosto, Mrs. Leland E., 40 Hillvale Dr. 5
Hotz, Mrs. John W., 141 N. Gay 5
Izmirlien, Mrs. Grant, 519 Fairview 19
Javaux, Mrs. E. J., 7820 Delmar Blvd. 30
Jensen, Mrs. Joshua E., 3 Brazillian Court 24
Jones, Mrs. Andrew B., 8100 Gannon Ave. 30
Jones, Mrs. Otey Sherman, 2010 Longfellow Blvd. 4
Jones, Mrs. Vincent L., 123 N. Forsyth 5
Karl, Mrs. Michael M., 14 Thorndell Dr. 17
Katz, Mrs. Samuel D., 825 Midland Blvd. 30
Keim, Mrs. John P., 4112 S. Grand Blvd. 18
Keller, Mrs. Louis, 10036 Springwood Dr. 24
Kelley, Mrs. Robert W., 5371 Waterman Ave. 12
Kendig, Mrs. John H., 4375 Forest Park 8
Kessler, Mrs. Edward H., 8721 Halls Ferry Rd. 15
Kienzle, Mrs. E. C., 6200 Loren 9
King, Mrs. Samuel J., 7206 Dale Ave. 17
Kirchner, Mrs. Walter C. G., 7452 Wise Ave. 17
Klaff, Mrs. Daniel D., 919 S. Meremac 5
Klein, Mrs. Harry A., 7256 S. Roland 21
Klippel, Mrs. Bernhardt W., 52 Fair Oaks 24
Kluegel, Mrs. William A., 2845 Gravois Ave. 18
Klym, Mrs. Nicholas, 1506 Doris 38
Kneal, Mrs. Ellsworth, 725 S. Skinker 30
Knight, Mrs. Franklin P., 11457 Fairlane 36
Knight, Mrs. William A., Jr., 1407 Coburg Lands Dr. 15
Koetter, Mrs. A. F., 6208 Rosebury Dr. 5
Koon, Mrs. Bernard T., 2623 Gurney Court 10
Kountz, Mrs. William B., 2619 Gurney Court 10
Koutsoumpas, Mrs. William, 3024 Hawthorne 4
Kowert, Mrs. Edward H., 662 Elwood 19
Kramolowsky, Mrs. Helmith H., 546 Sheffield Ave. 19
Kubitschek, Mrs. P. E., 5385 Waterman 12
Kulbricht, Mrs. Thomas C., 8361 Pepperidge 21
Ladd, Mrs. Charles B., 5900 Loughborough 9
LaDriere, Mrs. Raymond, 907 S. Hanley Rd. 5
Lamb, Mrs. Patrick, 6426 Evergreen 21
Langsdorf, Mrs. Herbert S., 3681 Alberta Ave. 16
Lansche, Mrs. Elmer A., 8358 Racquet Dr. Bel Nor 21
Lawton, Mrs. Thomas P., 410 Newstead Ave. 8
Leavy, Mrs. Charles A., 9058 Monmouth Dr. 17
Lembeck, Mrs. Joseph A., 4103 Flora Pl. 10
Lerwick, Mrs. Everett R., 5342 Mardel 9

Lieb, Mrs. Francis X., 19 Ridgemoor 5
Lohr, Mrs. Curtis H., 601 S. Brentwood 5
Lottes, Mrs. J. Otto, 1028 Winwood Dr. 24
Lucido, Mrs. Joseph L., 6 Bellerive Acres 21
Lytton, Mrs. William B., 29 Overhills Dr. 17
Macdonald, Mrs. John W., 4525 Lindell Blvd. 5
Macdonald, Mrs. William C., 63 Briarcliff 24
Malles, Mrs. A. Conrad, 10016 Springwood Dr. 24
Martin, Mrs. Charles E., 216 Wesley Ave. 35
Martin, Mrs. Raymond T., 3468 Longfellow Blvd. 4
Mason, Mrs. Roy E., 7130 Maryland 30
Mathae, Mrs. George H., 3167 Grand Blvd. 18
Maze, Mrs. Lawrence E., 847 Wenneker Dr. 24
Meisenbach, Mrs. Albert E., 5475 Cabanne Ave. 12
Mendonsa, Mrs. Lawrence E., 2126 Glendon Pl. 17
Merenda, Mrs. Sam J., 45 Berry Rd. Park 22
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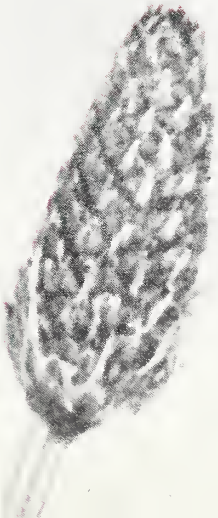

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Curiosa et Trivia

WILLIAM B. McCUNNIFF

Cerebral Stenosis, 1960: Five years after announcement that Salk polio vaccine was 80 to 90 per cent effective, about half of Americans are not immunized; worse yet, about 5,000,000 (five billion, that is) children under 5 are unvaccinated. About a third of the population has had three shots.

Talk about "high on the hog" . . . the daily per capita calorie intake is highest in Ireland—3,510; Americans, for all their weight-control problems, rank sixth, with an average of 3,100 daily. The hearty appetites in Denmark, New Zealand, Switzerland and Australia fill in the intervening places.

Thirteen thousand eight hundred American workers died as a result of work injuries in 1959; almost 85,000 had some degree of permanent impairment. This represents an increase of 8 per cent over 1958.

An 11 pound baby who loses 120 cc. of blood has lost about 25 per cent of his blood volume; to sustain an equal reduction in volume, a 150 pound adult would have to lose 1,500 cc.

Capsule Clinics

- Pretreatment of thyrotoxic patients with methylthiouracil prior to administration of I^{131} renders the gland relatively radioresistant. Crooks, J., et al. Brit. M. J. **1**:151, 1960.
- Vulvitis has a high correlation with undiagnosed diabetes mellitus and abnormal carbohydrate metabolism. Swartout, J. R., et al. Obst. & Gynec. **15**:131, 1960.
- Klinefelter's syndrome with positive sec-chromatin pattern is often associated with some degree of mental deficiency. Relationship of the brain disorder to the anomalous sec-chromatin pattern is unknown. Mosier, H. D., et al. Pediat. **25**:291, 1960.
- The patient's description of his head noise is of no value to the examiner in decisions regarding diagnosis, type of deafness or probable site of origin of the tinnitus. Reed, G. F., Arch. Otolaryngol. **71**:84, 1960.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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she calls it "nervous indigestion"

diagnosis: a wrought-up patient with a functional gastro-intestinal disorder compounded by inadequate digestion. **treatment:** reassurance first, then medication to relieve the gastric symptoms, calm the emotions, and enhance the digestive process. **prescription:** new Donnazyme—providing the multiple actions of widely accepted Donnatal® and Entozyme®—two tablets t.i.d., or as necessary.

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WASHINGTON

CONGRESS RECESSES UNTIL AFTER POLITICAL CONVENTIONS

The Senate voted 63 to 26 to adjourn Congress on July 2 for the political conventions and return to work August 8. As a result of the recess, the Mills Bill (HR 12580) will not be acted on by the Senate until Congress reconvenes. . . . Congress is expected to end the 86th session by Labor Day for the all-out electioneering ahead. . . . A recess probably means that the issue of health care of the aged will be injected even more prominently into the political arena. The topic is expected to be the subject of much discussion at the two conventions. . . . What the effects of the recess and the additional mulling of the aged issue will be on Congress is impossible to predict with any degree of accuracy at this time.

SENATE HEARINGS

Dr. Leonard Larson, President-Elect of the AMA, and C. Joseph Stetler, director, Legal and Socio-Economic Division of the AMA, appeared before the Senate Finance Committee which held a hearing on the Mills Bill, June 29-30. . . . Dr. Larson submitted a 30-page statement outlining the AMA's views on Title VI of HR 12580 which deals with health care of the aged. . . . He then urged passage of this portion of the bill pointing out that it is designed to help those who really need help, that it allows the majority to continue voluntary methods of financing health care, and that it makes the states primarily responsible for administration of the program. . . . Dr. Larson also submitted a letter to Sen. Byrd, chairman of the committee, in which he stated that as far back as 1949, the House of Delegates of the AMA has been on record as opposing the inclusion of physicians under Social Security on a compulsory basis. . . . After Dr. Larson finished his oral testimony, Chairman Byrd asked him AMA's position on the Administration bill. Dr. Larson replied that it would be difficult to state AMA's position because the AMA had not had an opportunity to examine a specific bill. He added, however, that from what he had read of it, the AMA would not favor the Administration approach.

OTHER TESTIMONY

Following Dr. Larson's testimony, Nelson Cruikshank appeared for the AFL-CIO. His most significant statement was endorsement of Sen. Anderson's proposal to be added to the Mills Bill. This would cover beneficiaries 68 and older, provide for a $75 deductible, and would be under Social Security. . . . Senators Frear and Curtis attacked the union position because it involved compulsion and because in many cases it would wind up with the poor paying for benefits received by the rich. . . . Senators Douglas and Hartke praised the AFL-CIO stand. . . .

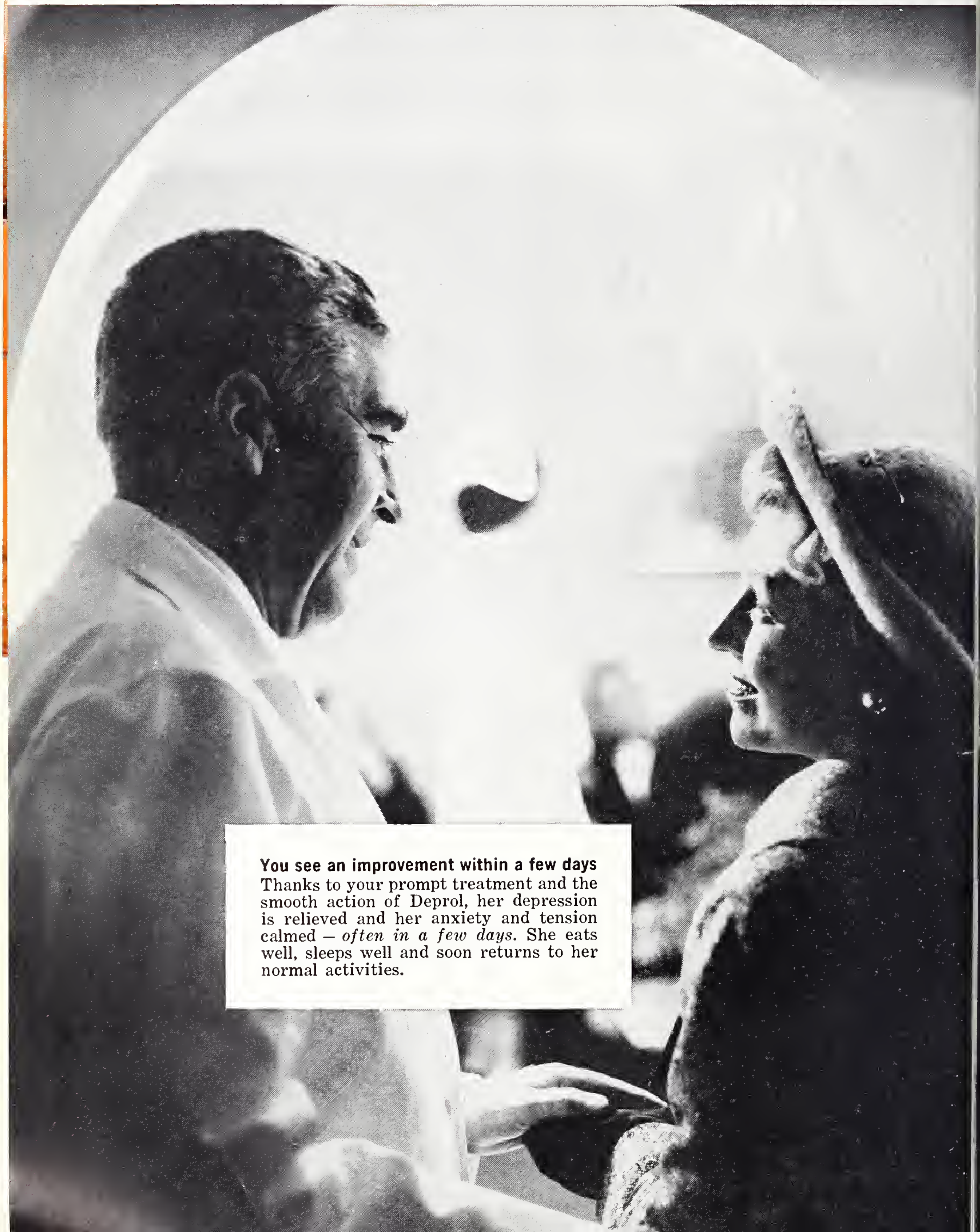
According to some sources, Sen. Anderson's proposal was a "compromise plan" which is aimed at rallying Democratic members on the Senate Finance Committee around a single plan. It definitely is an indication that Senate Democrats are still seeking a social security-type health bill.

E. J. Faulkner also appeared before the committee as a representative of the insurance companies. He urged no action at all on the issue until after the White House Conference on Aging. At the same time, he said the Mills Bill was a sound approach if Congress had to pass a bill. . . . Faulkner ran into the most hostile questioning with Senators Douglas and Hartke. . . . The latter challenged Faulkner's statement that anyone who needs health care and seeks it has it available to him irrespective of his ability to pay. Sen. Hartke declared that there were "deplorable" conditions in the health care of "some" people and that these needs were headlined by the newspaper in his home town of Evansville, Indiana. . . . Faulkner countered that many county medical societies have periodically inserted newspaper ads reminding readers that medical care is always available, regardless of ability to pay.

In earlier testimony, HEW Secretary Flemming endorsed the Mills Bill but suggested "implementing" it with the Administration's proposal. . . . Flemming was questioned extensively by committee members, most of whom were critical of the cost of his program. . . . Sen. Byrd challenged whether the Budget Bureau approved the $1.2 billion program and questioned whether the states could afford to put up the money, and whether the U. S. budget could be balanced under it. . . . Sen. Marshall told Flemming that he had "never seen such fiscal irresponsibility."

On June 30, Sen. Saltonstall introduced the Administration's health bill for the first time in Congress. The measure would provide a half year of hospital care and unlimited nursing home and medical care for 12 million persons over age 65 who do not pay income tax and whose income from all sources is less than $2,500 for a single person or $3,800 for a couple.

Lifts depression..



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Across Missouri

Insurance Benefits

Health insurance benefit payments by insurance companies to the people of Missouri climbed to a new high during 1959, the Health Insurance Institute reported recently.

In the period from January 1 through December 31, 1959, an estimated $74 million was paid out to help cover the cost of doctor and hospital bills, and to replace income lost through sickness or disability.

This represents a gain of 25.4 per cent over the 1958 figures of $59 million, and is based on reports from insurance companies doing business in the state. This percentage increase was the largest of any state in the nation.

The rise in benefit payments in Missouri is reflected in the figures for the nation as a whole, the Institute reported. Persons with health insurance received a total of more than $2.9 billion in benefits from their insurance company policies in 1959, up 9.6 per cent over the previous year's high of more than $2.6 billion.

Polio Protection

Half of Missouri's population has failed to take advantage of polio vaccine, according to estimates by the Missouri Division of Health. In the national picture, recent estimates by the Public Health Service show that more than 91 million persons now have had one or more shots of polio vaccine and 72 million of them have had the three or more shots required for complete vaccination. These figures indicate that 40 per cent of the population now has maximum protection against polio.

Eleven per cent have been partially vaccinated with one or two injections, but 49 per cent have had no vaccine at all. Among children less than 5 years of age, who accounted for 43 per cent of all paralytic polio cases last year, there are still 8.5 million, or 42 per cent of all children in that age group, who have had less than the three or more shots required. Nineteen per cent of them have had no vaccine at all.

Education in Missouri

The Research Report of the National Education Association shows that Missouri is 39th among the states in the percentage of population with four years of high school education and 38th in the population percentage with a college education.

The *Kansas City Star* recently pointed out that Missouri is 17th in per capita income and 15th in estimated school-age population but is 36th in per capita local and state expenditures for public schools. Thirty states pay a higher average teacher's salary that does Missouri.

As the *Star* states, "The unfavorable recital goes on." Only 62 per cent of the Missouri 8th graders of 1953-54 were graduated from high school in 1958, placing Missouri 31st in this category. By comparison in Wisconsin 94.5 per cent graduated from high school in the same period. In pupil-teacher ratio for elementary and high schools, Missouri is 42nd with a figure of 27.8 pupils per teacher. By comparison, Kansas had an average of 22 pupils with each teacher and Illinois 23.3.

Missouri's Business Climate

The Missouri State Chamber of Commerce has prepared a new research report entitled "How Good Is Missouri's Business Climate?"

The report is an outgrowth of a survey made by the Chamber last winter when 4,300 Missouri businessmen received questionnaires. The report deals with a wide range of subjects bearing on the desirability of Missouri as a location for a business enterprise, local and state laws governing business and industry, transportation and public utility facilities, supplies of workers, skills and aptitudes of workers, taxes and many other subjects.

The booklet is available upon request to the Missouri State Chamber of Commerce, Jefferson City.

CLINICAL REMISSION N A "PROBLEM" ARTHRITIC

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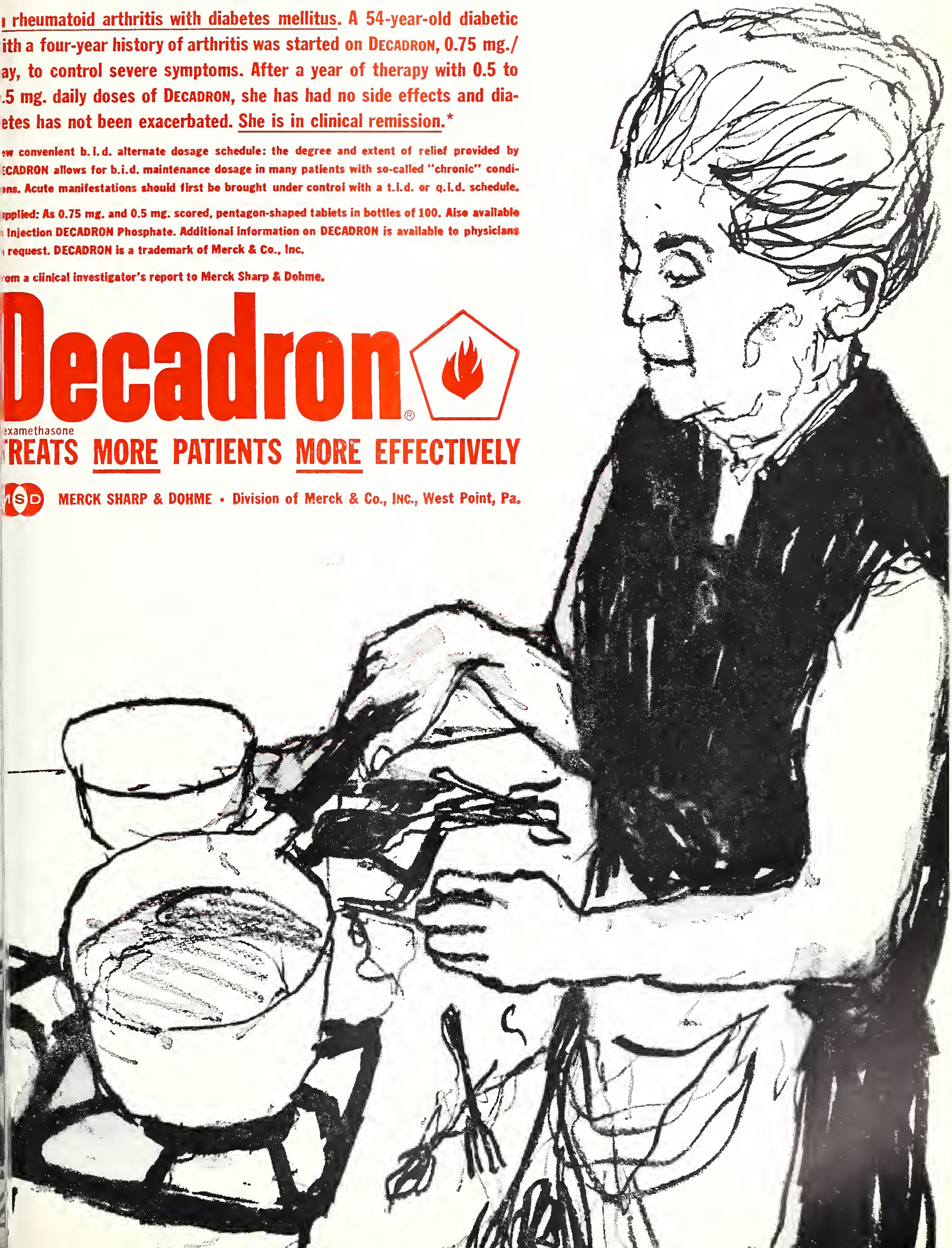


JOHN F. PEARL, M.D.

Missouri Academy of General Practice

Some 625 people registered for the "Symposium on Modern Trends in Therapy," held at the Chase Hotel in St. Louis, Sunday, May 1. This outstanding one day clinical session was sponsored by the St. Louis Academy of General Practice with the St. Louis University School of Medicine, Washington University School of Medicine and Lederle Laboratories cooperating. The program was acceptable for five hours of Category I Credit for the many Academy members who attended.

The St. Louis Academy presented a symposium on May 1.

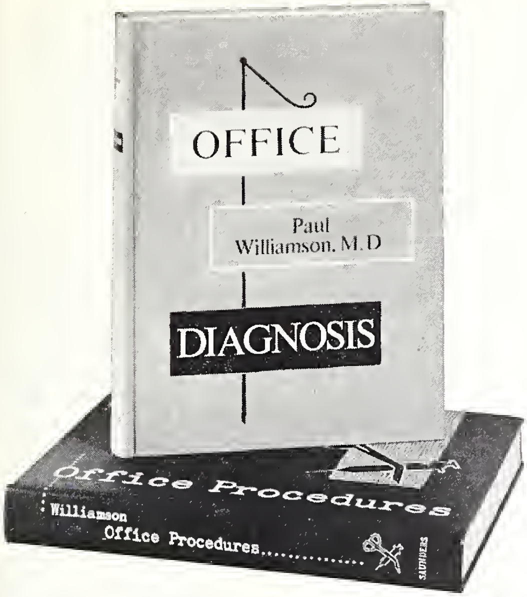
Judging from the many comments heard floating around during the session, this symposium was one of the best, if not the best, the St. Louis Academy has had the privilege of sponsoring to date. The best evidence of this was the "full house" right down to the finish of the last speaker's presentation. Some juggling of the program had to be made so that Dr. Howard Rusk could fulfill another engagement the same day, namely; address at the dedication of the new General John Pershing Memorial Hospital at Brookfield, Mo. The cooperation of the speakers on the program was splendid for making time changes in their discussions at the last minute. The full attendance of the audience throughout was certainly evidence that the program was not built around just one or two outstanding speakers.

Dr. Wilson gave the luncheon address.

An outstanding highlight of the program was the luncheon session attended by both doctors and their wives featuring Vernon E. Wilson, M.D., Dean, University of Missouri Medical School, Columbia, as the luncheon speaker. Dr. Wilson spoke on the subject, "Current Trends in Medical Education." He pointed out that the University of Missouri Medical School at present is studying the possibility of reducing by one year the length of time necessary for the completion of the M.D. degree. A special committee of the University Medical School is studying the plan, but is giving forth no detailed information as yet as to how the plan may work. Dr. Wilson pointed out that to meet the demands of maintaining the present physician population ratio, medical schools will have to graduate at least 3,000 more physicians per year by 1975. He indicated that this undoubtedly will necessitate the opening of additional new medical schools plus the expan-

President Cohen presented the gavel to incoming President O'Connell at the installation dinner.

(Continued on page 1070)



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Office Diagnosis

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Woman's Auxiliary

I close my eyes and play a childish game of "See What You Can Remember About the Convention in Miami Without Your Notes" and a blue and white background springs up—blue sky dotted with white clouds, and blue sea waving with frothy whitecaps. Across the background drift faces—new faces from other states, and familiar faces of presidents and presidents-elect from other states whom I had met at last year's convention and at the Fall Conference in Chicago. And there are the faces of our own Missouri Delegates, whose company I enjoyed so very much: our President-elect, Jane Wade; the wife of the President of the Missouri State Medical Association, Mrs. Muether; Mrs. Nielson, of St. Louis; our Past-President, Mrs. McBurney of Slater; Mrs. Whitman and Mrs. McVay of Kansas City; and, of course, Betty Sutter, also a Past State President, and who is our new National Chairman of Mental Health. We are certainly proud of her.

Mrs. Jordan Kelling

Tennessee won the Ethel Gastineau Trophy, a beautiful old silver tureen, for outstanding work in A.M.E.F. How wonderful it would be if it could be placed in the hands of Jane Wade next year to bring back to Missouri! A new committee for Rural Health was created at the business session, and the name "Paramedical Careers Recruitment" was changed to "Health Careers" in order to include the recruitment of students to study to become doctors.

Dr. Edward Bortz inspired us in his address, "The Evergreen Years," urging us to take full advantage of the "grandeur of maturity," telling us that the climax of any good play does not take place in the first act, but in the third. His address will be reprinted and I urge you to give yourselves a break by reading this excellent speech. Write for it at National Auxiliary Headquarters, 535 North Dearborn St., Chicago 10, Ill.

All who met Mrs. Gastineau at our State Convention is St. Louis can imagine the enthusiastic and joyous manner in which the business was well conducted. On Thursday, Mrs. William Mackersie, of Detroit, was installed as our new National President, and Mrs. Harlan English was elected President-elect.

Members from every county in Florida cooperated in making arrangements and carrying them out; from each auxiliary in Florida were members taking care of registration and the hospitality room, making decorations, and assisting in the thousand-and-one chores which make up such an endeavour. It was one of the inspirations of this outstanding convention to see the teamwork displayed there.

The lush tropical gardens of Miami made me feel very sorry for my poor but sincere efforts to create beauty right in my own backyard; but I found, to my surprise, that the roses which needed spraying now even more than when I went away still looked beautiful to my eyes!

Yes, it is good to be back home to dear Missouri; to be all filled with ambition to grow more beautiful flowers; and to inspire my State Auxiliary, as I have been inspired, to do bigger and better things during this year.

High in flavor but low in fat: kabobs, salad with cottage cheese dressing, angel cake with whipped skim milk topping

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Palatability is the key to this special diet. And these dishes have real appetite appeal.

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The Kefauver Investigation: Is It Truly an Inquiry?

Following is an abstract of an address delivered to the graduates and alumni at the Annual Banquet of the St. Louis College of Pharmacy June 8, 1960, by Jerome I. Simon, M.D., St. Louis.

* * *

The integrity of the health team—the hospital, the physician and the pharmacist—is in jeopardy. The last few decades have seen an increase in the tempo of critical appraisal of the costs of medical care. "Medical care" is in reality a misnomer, for it carries the connotation of care given by the physician and the cost of the medicines he prescribes. In truth, the major component of the total cost of illness today is the high price of hospital care. Years ago, certain elements in government began the move towards government subsidy of the medical profession. These attempts have not succeeded, but they were never truly abandoned. The most recent impetus to federal medical control has been supplied by backers of the Forand bill, a measure calculated to have Uncle Sam pick up the tab for the hospital and surgical care of Social Security beneficiaries. We are now speaking of the cost of such care for between twelve and fifteen million people. The cost of this greatest of all give-aways would be staggering, not only in actual payments to those rendering services. One facet of this fabulous sum has never, to my knowledge, been mentioned in the press. I refer to the cost of administration of the gigantic bureau that such a move would create. Think of the salaries and equipment costs necessary to pay for thousands of employees and business machines. This would indeed be a monumental bureau, furthering the concept of government by bureaucracy. The added tax burden for you and for me is only too obvious.

Let us consider the Kefauver investigation of the pharmaceutical industry presently in progress in Washington. This is probably part of an over-all plan to discredit the medical and pharmaceutical professions. Remember that the correct name of the Kefauver Committee is the Antitrust and Monopoly Subcommittee of the Senate Judiciary Committee. Such a committee, making a fair and impartial inquiry, should present both sides of its investigation. However, the releases to the public press—at least in the papers that I saw—were, to say the least, unilateral presentations. Rather than transcripts of testimony for and against monopolistic practices, the press reports of the hearings have become no less than a trial by publicity, with more than coincidental aspects of propaganda.

The best summary of the proceedings to date that I have been able to find was given to the Iowa Pharmaceutical Association's convention in March, 1960, by Senator Alexander Wiley of Wisconsin, ranking Republican on the Senate Judiciary Committee. I quote: "In this trial by investigation of the drug industry, little attention was paid to the balancing arguments of the defense.

"The public attention was constantly directed to profits on a single product of a single company—without relating these to the many thousands of products produced by the entire industry, or the over-all costs of doing business;

"Hardly any reference was made to the high risks of this industry, which in 1958 had to test 114,600 substances before it could produce 40 marketable drugs;

"Little reference was made to the high degree of obsolescence in the drug industry—where one product can have 99 per cent of the market one year, and only 3 per cent two years later;

"No mention was made of the fact that wages increased 70 per cent between 1948 and 1958, and construction costs 64 per cent—the increase in the wholesale drug prices was 3 per cent only;

"No mention was made of the fact that the Soviet Union, in which the profit motive does not exist, produced no single new drug since the Communist Revolution;

"And this being a monopoly investigation, it is surprising that nobody bothered to emphasize that more than 1,300 companies are engaged in the manufacturing of prescription drugs—with no one company accounting for as much as 10 per cent of the total sales."

To the best of my recollection, the first time that I had seen any of these telling defense statements in print was in Senator Wiley's speech. The Senator could have told as well of the product that was evolved after the expenditure of seven years and a half million dollars by a large manufacturer. A resin designed for the reduction of edema, the product was never marketed, for, in the words of one of the research staff" . . . it had the delightful taste and texture of wet

(Continued on page 1036)

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Surgery of the Common Bile Duct

Stone and Stricture

Two problems in surgery of the common bile duct, stones and stricture, are discussed, including etiology, selection of patient, pitfalls that may be avoided and technics.

Dr. Hallenbeck is from the Section of Surgery of the Mayo Clinic and Mayo Foundation, the Foundation being a part of the Graduate School of the University of Minnesota.

This paper was presented at the 102nd annual session of the Missouri State Medical Association, March 14, 1960, in St. Louis.

Two problems in the surgery of the common bile duct always demand attention. The first, stones, is encountered frequently; the second, stricture, although infrequent, is a serious problem that can be minimized by good surgical technic.

Choledocholithiasis

Ordinarily, the common gallstone forms in the gallbladder. In the presence of chronic obstruction of the common bile duct in patients whose gallbladders have been removed (for example, in those with stricture of the bile duct), stones are known to form in the common and the intrahepatic bile ducts. It is probable that stones may form occasionally in the unobstructed bile duct, and it is certain that stones once there may enlarge, but most stones found in the duct originated in the gallbladder and reached the common bile duct via the cystic duct. Gallstones and cystic ducts vary in size considerably; the combination most likely to result in choledocholithiasis, of course, consists of small stones and a large cystic duct.

Once in the common duct, gallstones apparently may cause no symptoms for years or may produce one or more of a variety of signs and symptoms, the classic ones being pain, jaundice, chills and fever. The jaundice is typically fluctuating rather than constant, modest rather than severe, and is associated with darkening of the urine. On occasions, but these are infrequent, a large stone lodged in the ampulla of Vater may produce complete obstruction with jaundice that is deep and persistent. The chills and fever that appear are variable both in occurrence and intensity; they are attributed to infection in the ductal system. Pain is that of biliary colic, usually most severe in the right upper quadrant of the abdomen and extending around to the right posterior thoracic region, although variations in the location of the pain are common. The pain is episodic rather than constant.

Selection of Patients for Exploration of Common Duct at Time of Cholecystectomy.—During every cholecystectomy, the decision must be made whether or not to explore the common bile duct in search of stones. The incidence of stones in the common bile ducts of patients undergoing cholecystectomy for cholelithiasis is estimated to be between 10 and 20 per cent.[1, 2] Glenn[2] has emphasized that the incidence of choledocholithiasis is much greater in elderly people than in young people with cholelithiasis. Exploration of all common bile ducts at the time of cholecystectomy would result in many needless procedures that add to the morbidity and mortality from the operation.

How then can the surgeon best select the patients who should have choledochostomy? Traditionally, selection has been made on the basis of the history and the operative findings; more recently, operative cholangiography has been used more and more widely.

A *history* of jaundice, chills or fever, usually associated with appropriate pain, is suggestive of choledocholithiasis and ordinarily leads the surgeon to explore the common bile duct. Absence of these signs and symptoms does not exclude the possibility that stones are present in the common bile duct.

Operative findings that demand choledochostomy are the palpation of stones in the duct and enlargement of the duct. The finding of small stones in the gallbladder when the cystic duct is of ample size and the finding of an unusually large cystic duct suggest that the common duct should be explored. Stones in the common bile duct can be difficult to palpate, and failure to palpate them does not prove that none is present. Likewise, although ducts containing stones are usually larger than ducts free of stones, exceptions to the rule exist. As Ferris[1] has pointed out, the shorter the time a stone has been in the common duct the less likely is it to have caused the duct to become dilated.

Although individually, each of these criteria for exploration of the common duct has many exceptions, collectively they permit the surgeon to evaluate the problem fairly well. My colleagues at the Mayo Clinic, using these criteria for many years, found themselves exploring the bile ducts in approximately a fourth of the patients undergoing cholecystectomy and finding stones therein in a little less than half of these or about 12 per cent of the total.

Choledocholithiasis can be overlooked in two ways: (1) by failing to suspect that a stone is present and therefore omitting choledochostomy, and (2) by overlooking stones in the course of performing exploratory choledochostomy. Ferris[1] estimated that the incidence of "unsuspected stones" was between 3 and 4 per cent in his hands. Primary operative cholangiography is a logical way to detect these stones. Although some surgeons have considered that the incidence of false positive findings caused by air bubbles and false negative findings caused by failure to demonstrate clearly all parts of the ductal system might limit the accuracy of the method until it is no better than that which a skilled surgeon can achieve without it, those surgeons who have used primary operative cholangiography routinely, and thereby have become proficient with it, regularly testify as to its usefulness.

Exploration of the Common Duct.—The first step in exploration of the common bile duct consists of making an incision about 1 to 2 cm. in length through its anterior wall. Ordinarily, this incision is made in the long axis of the duct; occasionally, when the duct is very large and when the surgeon suspects he may wish to perform choledochoduodenostomy, the incision is made transversely. Scoops of various sizes are used to seek out stones, the commonest site for them being the lower end of the duct near the ampulla of Vater. The Bakes dilators, a series of instruments varying from 3 to 11 mm. in diameter, are useful for gently dilating the sphincter of Oddi. It is essential that instruments be passed into the duodenum to be sure that exploration of the lower end of the duct is complete. Occasionally, duodenotomy may be required to ascertain that the opening of the bile duct is patent and that all stones are removed. Palpation of the duct when it contains a probe that extends into the duodenum is a useful maneuver. Stones in the intrahepatic ducts can be difficult to remove. Small scoops are useful, but thorough and repeated irrigation of the ducts with saline solution usually gives best results. Apparently even surgeons most experienced in this work and using these technics may overlook stones in from 8 to 12 per cent of cases in which exploration is carried out.[3-5]

Secondary operative cholangiography made via the T tube that is sutured into the common duct can diminish the number of stones overlooked. Difficulty may be experienced with air bubbles that give falsely positive findings. Ferris[6] eliminates these by flushing the T tube and bile duct with 200 or 300 cc. of saline solution while the patient is in the Trendelenburg position, before introduction of the radiopaque media, 35 per cent iodopyracet (diodrast). A cholangiogram made 10 days postoperatively before the T tube is removed provides a final check on the ductal system.

The Missed or Recurrent Stone.—When symptoms suggestive of disease of the biliary tract persist or return after cholecystectomy has been performed, especially if jaundice occurs, the question of choledocholithiasis is raised. Most gallstones are not radiopaque, and it is unusual for a plain roentgenogram of the abdomen to provide certain evidence that the common duct contains stones. Likewise, ordinary cholecystograms obtained after administration of a single dose of iopanoic acid (telepaque) do not outline the biliary ductal system. The bile ducts can be visualized after 6 gm. of telepaque is given orally in divided doses during a period of 12 hours along with paregoric given to promote contraction of the sphincter of Oddi.[7] Better results have followed use of iodipamide sodium (cholografin sodium) given intravenously,[8, 9] and this diagnostic tool has been helpful in appraising the patient who continues to have pain after cholecystectomy has been performed and who is suspected of having a stone or stones in the common bile duct. Visualization of the ducts is sometimes imperfect, and results of the test are sometimes equivocal. Furthermore, in the presence of impaired hepatic function, and in the presence of any but slight jaundice, the ducts will not be visualized.

Recently it has been reported[10] that if 1 gm. of telepaque is given orally three times daily for four days while the diet is low in fat, the majority of calculi that may be in the bile ducts become surrounded with a layer of radiopaque material and can be identified roentgenographically. This phenomenon is said to occur even in the presence of a moderate degree of jaundice (values for serum bilirubin of 2.5 to 5.0 mg. per 100 ml.), but it will fail in the presence of a minority of stones that do not become opacified and in the presence of severe jaundice or greatly impaired hepatic function. More experience will be needed to appraise the usefulness of this interesting phenomenon in practice. Helpful as the modern roentgenographic diagnosis of choledocholithiasis is, there remain many cases in which operation must be advised on the basis of clinical symptoms and signs without certain knowledge that the duct contains stones.

EVENTS LEADING TO BENIGN STRICTURES OF THE COMMON AND HEPATIC BILE DUCTS

Although a few benign strictures of the bile ducts occur spontaneously, the majority are caused by injury to the ductal system during performance of cholecystectomy. Unless such injuries are recognized and repaired at once, the immediate postoperative course is complicated and the end result is fibrous stricture of the bile duct with the common sequelae of chronic obstructive jaundice, cholangitis, hepaticolithiasis and progressive damage to the liver.

The course of events immediately after unrecognized injury to the common bile duct depends on a number of factors as follows:

TABLE 1

RESULTS OF VARIOUS OPERATIONS FOR STRICTURE OF BILE DUCTS*†

Operation and Follow-up Group, Year	*Total Operations*	*Excellent or Good Results, Per Cent*
Choledochocholedochostomy		
5 to 25	48	68
1 to 5	24	88
Choledochoduodenostomy		
5 to 25	41	69
1 to 5	17	82
Hepaticocholedochostomy		
5 to 25	11	40
1 to 5	4	25
Hepaticoduodenostomy		
5 to 25	69	55
1 to 5	20	60
Double hepaticoduodenostomy		
5 to 25	17	65
1 to 5	6	50
Double hepaticojejunostomy		
5 to 25	3	100
1 to 5	3	66
Hepaticojejunostomy		
5 to 25	5	20
1 to 5	8	63

* Results of such miscellaneous operations as hepaticostomy, insertion of T tubes, and choledochojejunostomy are not included.

† From Walters and Ramsdell.[13]

Common Duct Left Open, No Drainage Tubes.—Bile accumulates in the abdominal cavity, sometimes becoming localized in the subhepatic region and sometimes causing the physical signs of ascites. Signs of peritoneal irritation are usually present, and ileus is common. Untreated, some patients may have spontaneous drainage of bile through the recent operative wound. Most patients will undergo laparotomy, and the poor condition of many of these will limit the operation to placement of drains to the subhepatic space to establish an external biliary fistula.

Common Duct Left Open, Drainage Tubes Present.—Bile promptly appears in the dressings, and drainage soon becomes profuse. The surgeon may hope that the tie has slipped off the cystic duct or that an aberrant duct in the gallbladder fossa is causing the drainage; occasionally these occur. Drainage from the injured duct may continue for weeks or months. Infection in the fistulous tract commonly complicates the picture. When the external biliary fistula finally closes, jaundice, often with pain, chills and fever, promptly develops.

Common Duct Completely Interrupted by Ligature.—Jaundice is evident within a day or two and grows steadily more intense. Stools are acholic and the urine is dark. The liver enlarges. This situation may persist until corrective operation is performed; in some cases, the ligature on the duct may open and allow escape of bile several days later.

Common Duct Injured by Clamp or Ligature but Not Completely Interrupted.—An apparently normal postoperative course or one complicated by drainage of bile that ceases without subsequent jaundice occasionally can be followed later by formation of stricture and its sequelae.

Regardless of the mode of onset, uncorrected stricture of the bile duct sets in motion a train of events that is ultimately fatal: pain, jaundice, pruritus, cholangitis, hepatic damage that can progress to cirrhosis and finally death due to hepatic insufficiency or even bleeding from esophageal varices.

PREVENTION OF STRICTURE OF COMMON DUCT

In any discussion of strictures of the bile duct, the most important consideration is prevention of injury to the duct during performance of cholecystectomy. To approach this subject, let me inquire how these injuries occur. In some cases, the common or hepatic ducts are clamped during attempts to control bleeding that obscures the operative field. In others, the anatomy is simply misinterpreted and the common duct is clamped or even partially excised under the misconception that it is the cystic duct. Although some patients with stricture of the bile ducts are large and obese enough so that exposure of the biliary tract is difficult, and although some had acute cholecystitis with inflammation that could make identification of the common bile and cystic ducts difficult, a disproportionate number of patients are small slender women in whom one would expect cholecystectomy to be unusually easy. In these patients, traction on the gallbladder pulls the common duct forward in such a way that it can be mistaken for the cystic duct. With these points in mind, let us formulate a set of requirements to be met if injuries to the bile ducts and their sequelae are to be minimized.

1. *Proper Training.*—Do not operate on the biliary tract unless your training is such that you can cope with the problems that may arise.

2. *Proper Operating Conditions.*—No surgeon can perform cholecystectomy safely without good anesthesia, good lighting, an incision large enough to offer excellent exposure and assistants capable of providing this exposure.

3. *Proper Dissection.*—Never clamp or tie the cystic duct until you have identified the common duct above and below the point at which the cystic duct appears to enter it. Keep traction on the common duct and relax the tension on the cystic duct when deciding where to tie the latter, in order to prevent "tenting" the common duct and including a portion of it in the ligature or clamp.

4. *Proper Discipline in Emergencies.*—Never clamp bleeding vessels hastily and blindly. Control bleeding by compressing the hepatic artery and portal vein digitally, clean the operative field by use of suction if necessary, expose the bleeding vessel and clamp it accurately.

5. *Proper Use of Cholecystostomy.*—In selected cases of acute cholecystitis with inflammatory reaction obscuring the common bile duct, cholecystostomy may be the safest procedure.

6. *Proper Approach to the "Easy Cholecystectomy."*—Beware of the easy operation in the thin patient; let this circumstance remind you to slow down and be doubly careful to identify structures properly before tying and cutting them.

7. *Proper Immediate Treatment of the Injured Common Bile Duct.*—Should the common duct be injured and the injury be recognized, best results follow immediate end-to-end reconstruction of the duct over a T tube, the long limb of which leaves the duct through an opening separate from the anastomosis.

LATER TREATMENT OF THE INJURED COMMON BILE DUCT

If the injury goes unrecognized at the time of cholecystectomy, it is occasionally possible to correct it a few days later when its presence becomes known. Often, however, operation at this stage is complicated by infection and inflammation of the tissues and the poor condition of the patient. Under these circumstances, establishment of an external biliary fistula may be safest and best, delaying repair until several months later when the inflammatory reaction has subsided. If the opening in the bile duct can be found, a catheter can be placed into it; if not, placement of a Chaffin sump drain in the region of the porta hepatis will, when suction is applied, evacuate the bile and establish a fistula. A Stamm gastrostomy done at the same time provides a means of introducing bile from the fistula into the stomach. After seven to 14 days, the Chaffin drain can be replaced by a straight catheter, held in place with adhesive tie tapes. The fistulous tract will contract down around this catheter and ordinarily little bile will be lost around it. Reconstruction of the duct can be delayed for from three to six months to allow inflammatory reaction to subside.

Definitive treatment consists of restoring continuity between bile duct and intestine. This is not the place for a detailed discussion of the operative technics involved, but a few remarks will outline the problem. The task of finding the common bile duct and dissecting it from the scar tissue that envelops it without damaging the hepatic artery and portal vein can be formidable. When a portion of the common hepatic duct remains and is somewhat enlarged, the chance of successful repair is greater than when right and left hepatic ducts must be dissected that are flush with the liver or within it. Experienced surgeons differ in their preference of technics for reconstruction. Cattell and Braasch[11] find both ends of the common duct whenever possible and use end-to-end choledochocholedochostomy over a prosthesis, usually a T tube. Cole and associates[12] are among those who advocate end-to-end anastomosis between the bile duct and a Roux-Y loop of jejunum. Walters of our clinic has reported almost identical results after anatomosis of duct to duct and to duodenum.[13] He has found that cholangitis is not a problem after choledochoduodenostomy unless obstruction occurs at the anatomosis. All surgeons who operate on these patients use all these methods from time to time, depending on anatomic findings.

Regardless of what procedure is used, it is important that the bile ducts be cleaned of stones and debris, that scar tissue be excised as completely as possible, that effort be made to achieve union of mucosa to mucosa at the anatomosis and that the anastomosis be made without tension. The percentage of satisfactory results appears to vary between 40 and more than 70 per cent, depending on the circumstances. Results of Walters' extensive experience is shown in the table.[13]

Success sometimes occurs after several unsuccessful operations; failure to secure adequate drainage of the biliary tract leads ultimately to hepatic insufficiency and death. Even if many previous attempts have failed, reoperation is indicated unless hepatic insufficiency precludes survival. In the rare case in which finding a bile duct in the hilus of the liver proves impossible, the procedure of Longmire and Sanford,[14] by which an intrahepatic bile duct found in the course of partial amputation of the left lobe of the liver is anastomosed to a loop of jejunum, may solve the problem.

All those who have worked hard to develop and apply technics for correction of stricture of the common bile duct will agree that the best solution of the problem is its prevention. The responsibility of all of us who perform cholecystectomy is great.

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Staphylococcal Problem in Missouri

A Ten Month Study

A ten month experience with the staphylococcal problem in Missouri, with particular reference to the conditions in Barnes Hospital, is presented. Data accumulated by the Hartford Foundation Research Laboratory in cooperation with the Missouri Division of Health are analyzed.

Dr. Bernard and Dr. Cole are from the Department of Surgery, Washington University School of Medicine, St. Louis. Dr. Monsour is now with the Department of Bacteriology, McNeese College, Lake Charles, La.

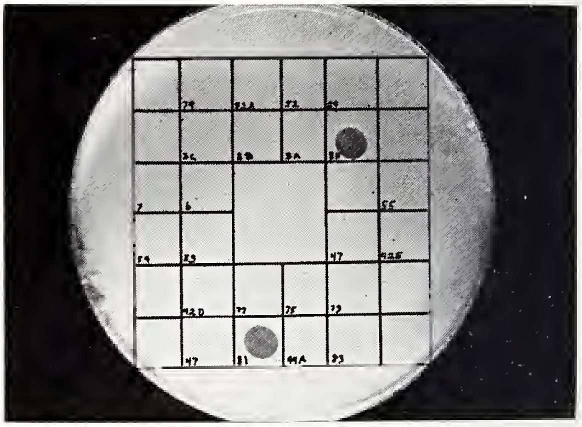
This report is an analysis of data accumulated from December 1958, through September 1959, by the Hartford Foundation Research Laboratory in cooperation with hospitals in Missouri through the Division of Health of the State of Missouri. The program was undertaken in the latter part of 1958 to study the staphylococcal infections in Missouri.

It was proposed that a careful study be made of the bacteriophage type of staphylococci causing infections in Barnes Hospital, and of staphylococci sent to the Hartford Foundation Research Laboratory by other participating hospitals in Missouri. Virtually no restrictions were placed on cooperating hospitals, and no charge was made for the service. The program was supported by a grant from the Hartford Foundation with the support of the Missouri Public Health Program.

Standard technics for bacterial culture and the disk method for antibiotic sensitivity testing were employed. Each staphylococcus which was found to be coagulase positive was subjected to bacteriophage typing. Observation was made in each case of the pattern of lysis of a confluent growth of the staphylococcus by 22 standard staphylococcal bacteriophages. These bacteriophages, generally considered to be filterable viruses, are parasitic to bacteria. Each virus is highly specific in that it attacks only one, or at most a few, related bacterial strains. Because of this specificity, it is possible to identify individual strains of staphylococci within the species by observing the pattern of lysis of the bacterial cells and consequent clearing of the media on which the bacteria have been cultivated (fig. 1). It is possible thereby to subdivide the species staphylococcus aureus into more than 132 strains. Some strains of coagulase positive staphylococci are not susceptible to any of the known bacteriophages, and consequently are as yet classifiable only as "non-typeable."

Results

During the period from December 8, 1958, until October 1, 1959,* a total of 2,265 staphylococcal cultures were obtained and processed. Samples from the City of St. Louis comprised 1,827 of the total, leaving 438 cultures which came from outside the general area of the City of St. Louis. The bacteriophage pattern of all the staphylococci referred to the Hartford Foundation is depicted in table 1. The bacteriophage pattern of the staphylococci from the City of St. Louis, including Barnes and Affiliated Hospitals, is listed in table 2. The bacteriophage pattern of the staphylococci from Barnes and Affiliated Hospitals alone is listed in table 3. The staphylococcal bacteriophage patterns of two of the non-



A photograph of a culture plate and superimposed reference grid used in phage typing of staphylococci. The pattern of lysis is typical of an 80/81 strain of staphylococcus.

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* On September 17, 1959, notice was given of the discontinuance of the staphylococcal bacteriophage typing program in the State of Missouri by the Missouri Public Health Service.

TABLE 1

PHAGE PATTERN—STATE OF MISSOURI

Cultures	2,265
	Per Cent
Non-typeable	35
80/81	28
Other types less than	3

The bacteriophage pattern of all the staphylococci referred to the Hartford Foundation from the entire state of Missouri, including St. Louis.

TABLE 2

PHAGE PATTERN—CITY OF ST. LOUIS

Cultures	1,827
	Per Cent
Non-typeable	32
80/81	30
Other types less than	2

The bacteriophage pattern of all staphylococci sent to the Hartford Foundation from the City of St. Louis, including Barnes and Affiliated Hospitals.

private hospitals from the vicinity of the City of St. Louis, hospitals C and D, are listed in tables 4 and 5, respectively. The bacteriophage patterns of the organisms submitted from cities other than St. Louis are listed in table 6, from the City of Kansas City in table 7, and the bacteriophage pattern of the staphylococci from hospital E, in a city of about 70,000 population, is listed in table 8.

In general, the 80/81 phage type was observed more frequently among the staphylococci originating from the City of St. Louis than from the organisms obtained from other areas in Missouri. Kansas City, in contrast to that of St. Louis, had relatively few 80/81 types of organisms, and the pattern in the "typical middle-size" town in Missouri was like that noted in Kansas City. The two non-private hospitals in the vicinity of St. Louis demonstrated a slightly lower frequency of

TABLE 3

PHAGE PATTERN—BARNES AND ALLIED HOSPITALS

Cultures	817
	Per Cent
Non-typeable	29
80/81	33
7	2
53	3
83	2
Other types less than	2

The bacteriophage pattern of all staphylococci from Barnes and Affiliated Hospitals.

TABLE 4

PHAGE PATTERN—HOSPITAL C

Cultures	49
	Per Cent
Non-typeable	25
80/81	29
54	6
80	6
77	6
79	4
29	4
Other types less than	2

The bacteriophage pattern of the staphylococci from one of the non-private hospitals, "Hospital C," in the vicinity of St. Louis.

TABLE 5

PHAGE PATTERN—HOSPITAL D

Cultures	104
	Per Cent
Non-typeable	36
80/81	22
52/52A/80/81	10
53/54	8
83	5
7	4
54	3
Other types less than	2

The bacteriophage pattern of one of the non-private hospitals, "Hospital D," in the vicinity of St. Louis.

TABLE 6

PHAGE PATTERN—MISSOURI HOSPITALS EXCLUDING CITY OF ST. LOUIS

Cultures	438
	Per Cent
Non-typeable	49
80/81	19
7	3
54	3
Other types less than	2

The bacteriophage pattern of all of the staphylococci sent from hospitals in outstate Missouri.

TABLE 7

PHAGE PATTERNS—KANSAS CITY HOSPITALS

Cultures	251
	Per Cent
Non-typeable	52
80/81	13
7	4
54	4
3A	4
Other types less than	2

The bacteriophage pattern of all staphylococci sent from the hospitals of Kansas City.

TABLE 8

PHAGE PATTERN—HOSPITAL E

Cultures	45
	Per Cent
Non-typeable	53
80/81	4
7	4
Other types less than	2

The bacteriophage pattern of all the staphylococci sent from "Hospital E," in a city of approximately 70,000 in outstate Missouri.

80/81 organisms than was found in Barnes Hospital, but one of these hospitals showed a distinct increase in the number of organisms in the 80/81/52/52A group during the year. Each of these differences was tested by the chi-square method. In each instance, statistical analysis indicated that the probability of such variations occurring simply by chance was less than .005.

In the last several years an increasing effort has been made at Barnes Hospital to detect and record all wound infections of major or minor significance. An attempt also has been made to identify the organism responsible for each wound infection. These wound infections have been separated, in so far as it was possible, into those occurring in clean wounds, in contaminated wounds and in dirty wounds. It is considered of great importance to differentiate these three categories if any attempt be made to assess the influence of hospital environment on the incidence of postoperative infection of wounds. Infections in wounds made in the area of an established infection may be attributed to some extent to contamination itself. This may also be true to some extent in the accidental wound and wounds made in areas of unavoidable contamination. However, infections which occur in clean wounds must be considered a direct result of either (1) a break in sterile technic, or (2) a break-down in the antiseptic or sterilizing methods used by the hospital.

TABLE 9

SERIOUS WOUND INFECTION* RATE AT BARNES HOSPITAL

August 1, 1958 to July 31, 1959

	Total No.	*Infected*	*Per Cent Infected*
Clean surgical wounds	6,866	53	.77
Contaminated wounds	2,595	38	1.47
Dirty wounds	789	23	2.92
Total	10,250	114	1.11

* The term serious wound infection as used in this study denotes an infection causing suppuration or a delay in wound healing.

The actual wound infection rate in Barnes Hospital from August 1, 1958, through July 31, 1959, is listed in table 9. Although the low incidence of infections in clean wounds in this hospital indicated that an epidemic did not exist, an attempt was made to correlate the data available in an effort to determine the possible sources of organisms involved in the infections which did occur. Among the possible sources of contamination which were investigated were (1) the patients themselves, (2) the nasopharynges of the medical and paramedical personnel involved in the operations, (3) the floors of the operating rooms, and (4) the air of the operating rooms. The bacteriophage pattern of the staphylococci recovered from all infection cultures in the Barnes and Affiliated Hospitals during the period of study has been listed in table 3 and, as noted previously, the 80/81 type comprised approximately 33 per cent of the total. Between December 1958, and October 1959, 56 staphylococcal wound infections occurred postoperatively in Barnes Hospital. The phage pattern for these infections is listed in table 10. The organisms recovered from these wounds were predominately antibiotic resistant. Table 11 demonstrates the antibiotic sensitivity pattern of these organisms.

TABLE 10

PHAGE PATTERN—56 SURGICAL WOUNDS

	Per Cent
Non-typeable	23
80/81	36
53	7
54	5
Other types less than	2

The bacteriophage pattern of the staphylococci isolated from the wound infections at Barnes Hospital.

Air samples were taken from two representative operating rooms in Barnes Hospital during this same period of time. Tellurite glycine agar was used as a selective media for the culture of coagulase positive staphylococci, and soy trypticase agar for the non-selective cultivation of all organisms present in the air. Air samples have been taken from the air of the operating room suite in several locations by means of the all

TABLE 11

ANTIBIOTIC SENSITIVITY OF STAPHYLOCOCCI RECOVERED FROM WOUNDS AT BARNES HOSPITAL

All Sensitivities Were Done by the Disk-Plate Method

Drug and Concentration	*No. of Strains*	*No. Sensitive*	*Per Cent Sensitive*
Aureomycin 30 mcg/disk	41	6	15
Bacitracin 10 units/disk	41	34	83
Chloromycetin 30 mcg/disk	39	26	67
Erythromycin 15 mcg/disk	41	15	37
Gantrisin 2.0 mg/disk	41	2	5
Kanamycin 30 mcg/disk	33	31	94
Neomycin 30 mcg/disk	41	34	83
Oleandomycin 15 mcg/disk	39	26	67
Penicillin 10 units/disk	40	7	17
Polymyxin B 300 units/disk	41	9	22
Ristocetin 30 mcg/disk	35	27	77
Sulfadiazine 1.0 mg/disk	41	3	7
Tetracycline 30 mcg/disk	39	5	13
Triple sulfa 1.0 mg/disk	34	0	0
Vancomycin 30 mcg/disk	34	33	97
Terramycin 30 mcg/disk	33	4	12

The number and per cent of staphylococci isolated from wound infections that were sensitive to a group of 16 antibiotics.

glass impinger and the Anderson Sampler. Ten cubic feet of air were passed through the samplers at each testing and the actual numbers of bacterial colonies that grew on the media were counted. Coagulase positive staphylococci were recovered 173 times from a total of 697 tests (25 per cent), from October 1958, through October 1959. The phage pattern of this group of staphylococci is listed in table 12.

The results of the culturing of the nasopharynges of the operating room personnel are listed in tables 13 and 14. Cultures of the floors in the test operating rooms were done regularly by a standardized technic. These results are listed in table 15. Chi-square evaluation of the relation-

TABLE 12

AIR SAMPLES

173 Isolates in 697 Samples

	Per Cent
Non-typeable	50
80/81	12
7	5
83	5
44A	5
52/52A/80/81	3
7/54	2
7/47/54	2
Other types less than	2

The bacteriophage pattern of all the staphylococci recovered from the operating room air.

TABLE 13

CULTURES OF THE NOSE AND PHARYNX OF THE OPERATING ROOM PERSONNEL

Number of persons' cultures	55
Number of persons harboring coagulase positive staphylococci	17
Per cent harboring coagulase positive staphylococci	30.9

The number and per cent of operating room personnel carrying virulent staphylococci in their nose or throat.

TABLE 14

PHAGE PATTERN OF NOSE AND PHARYNX OF OPERATING ROOM PERSONNEL HARBORING COAGULASE POSITIVE STAPHYLOCOCCI

Phage Pattern	*No. of Cultures*
Non-typeable	6
7/77	2
29/52/52A	2
80/81	1
52/52A	1
52/52A/80	1
29	1
79	1
3A	1
52A/80/81	1
Total	17

The bacteriophage pattern of all of the virulent staphylococci isolated from the nose or throat of operating room personnel.

TABLE 15

FLOOR SAMPLES

58 Isolated in 435 Samples

	Per Cent
Non-typeable	52
83	7
80/81	5
54	3
Other types less than	2

The bacteriophage pattern of all the virulent staphylococci recovered from the operating room floors.

ship of the frequency of contamination of the floor, air and personnel in the operating room indicates that there is a lack of correlation between their contamination rate with 80/81 organisms and the wound infection rate with 80/81 organisms (P = .005). On the other hand, using the same statistical means, a much closer correlation was found to exist between the wound infection rate with 80/81 organisms and the total hospital infection rate* with 80/81 organisms (P = 0.75).

The antibiotic sensitivity pattern of organisms recovered from the air of the two operating rooms is depicted in table 16. In general, the antibiotic sensitivity patterns of the individual strains of staphylococci were entirely random and, consequently, the antibiotic sensitivity of an organism cannot be used as a basis for classification.

TABLE 16

ANTIBIOTIC SENSITIVITY OF STAPHYLOCOCCI RECOVERED FROM THE ATMOSPHERIC AIR IN THE OPERATING ROOMS

All Sensitivities Were Done by the Disk-Plate Method

Drug and Concentration	*No. of Strains Tested*	*No. of Strains Tested*	*Per Cent Sensitive*
Aureomycin 30 mcg/disk	127	51	40
Bacitracin 10 units/disk	128	111	87
Chloromycetin 30 mcg/disk	128	119	93
Erythromycin 15 mcg/disk	128	96	75
Gantrisin 2.0 mg/disk	128	3	2
Kanamycin 30 mcg/disk	128	119	93
Neomycin 30 mcg/disk	128	124	97
Oleandomycin 15 mcg/disk	128	122	95
Penicillin 10 units/disk	128	63	49
Polymyxin B 300 units/disk	128	42	33
Ristocetin 30 mcg/disk	128	116	91
Sulfadiazine 1.0 mg/disk	128	1	1
Tetracycline 30 mcg/disk	128	91	71
Triple sulfa 1.0 mg/disk	128	1	1
Vancomycin 30 mcg/disk	128	125	98
Terramycin 30 mcg/disk	128	82	64

The number and per cent of virulent staphylococci recovered from the operating room air that were sensitive to a group of 16 antibiotics.

DISCUSSION

The data so far from Missouri indicate that there is a statistically significant difference between the staphylococcal phage pattern of the hospitals in the City of St. Louis and those in other parts of Missouri. It is impossible to assess these data further because of lack of follow-up of the cases from which these organisms were taken. Although the City of St. Louis has had a staphylococcal bacteriophage pattern which differed significantly from that of the remainder of the state, it is unlikely that a general outbreak or epidemic of staphylococcal infections has taken place during the time period covered by this study.

Barnes and Affiliated Hospitals have had a staphylococcal phage pattern closely resembling that of other hospitals in St. Louis. Despite this, the clean wound infection rate in Barnes Hospital, .77 per cent, compared favorably with similar reports from other surgical services.[1, 2, 3] Once again, it is impossible to assess the probability of small, self-contained hospital outbreaks without more complete epidemiologic data.

The observations made on the bacteriophage patterns in the various areas of possible contamination indicate that the most likely sources of the contamination leading to a wound infection with staphylococci are the patients cared for within all services of the hospital. The problem remaining is to define the modes of cross infection from patient to patient in order that the proper remedial steps might be taken. This does not imply that meticulous care should not be taken to keep operating rooms bacteriologically clean, operating personnel clean and healthy, and to conduct the operation with rigid asepsis.

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* The total hospital infection rate with 80/81 organisms refers to the incidence of 80/81 organisms in staphylococcal infections of all kinds cultured in the hospital laboratory and is recorded in table 3.

JOHN T. LOGUE, M.D., *and* **WARREN P. SIGHTS, JR., M.D.,** *Columbia*

Frontal Sinus Osteoma And Recurrent Meningitis

A Case Report

Reported cases of acute bacterial meningitis resulting from the intracranial spread of sinus and orbital infections around an eroding frontal or ethmoid sinus osteoma are rare. Cases of sinus osteoma and meningitis are less commonly reported than cases of sinus osteoma with mucocele, sinus osteoma with pyocele, and sinus osteoma with brain abscess. Cases of sinus osteoma and meningitis are less frequently reported than the rarer cases of sinus osteoma with intracranial pneumatocele.

Harvey Cushing first directed attention to the intracranial approach to sinus osteoma in 1927.[1] Two of the four cases then reported succumbed to meningitis. One case of meningitis occurred as a postoperative complication in a patient in whom a dural tear was not repaired at operation. The other case of meningitis occurred in a patient with an orbito-ethmoidal osteoma and recurrent orbital infections. Excision of this osteoma was prevented by the presence of an infected frontal sinus.

In a comprehensive review of 321 cases of sinus osteoma, Teed[2] found only one case of meningitis in an unoperated case. In contrast, fatal meningitis occurred in nine additional cases in which operative removal of the osteoma had been attempted. Bruner and Spiesman[3] reported an additional case of fatal meningitis with an osteoma of the left ethmoid and sphenoid sinus discovered at autopsy. Additional cases of meningitis and sinus osteoma have been reported by Kassel[4] and Langeron.[5]

The present case is unusual in that the patient suffered from two episodes of bacterial meningitis before discovery and removal of the frontal sinus osteoma.

Case Report

This 20-year-old soldier was first admitted to the 121st Evacuation Hospital in Korea with a four day history of clear, watery coryza and severe unrelenting generalized headache followed by chills, fever and sweats. Physical examination revealed a moderately dehydrated, drowsy male with generalized lymphadenopathy, ptosis of the right upper eyelid, nuchal rigidity, and positive Kernig and Brudzinski signs. Deep tendon reflexes were bilaterally equal and normal. No abnormal reflexes were present. The temperature was 103°F. The pulse was 98 per minute and regular. The respirations were 24 per minute. The blood pressure was 110/58.

Medical literature has few cases of acute bacterial meningitis resulting from intracranial spread of sinus and orbital infections around an eroding frontal or ethmoid sinus osteoma. A case of right frontal sinus osteoma and recurrent acute pneumococcal meningitis with roentgenologic, operative and pathologic findings is presented.

Dr. Logue is Clinical Assistant Professor of Medicine and Dr. Sights is Assistant Professor of Neurosurgery in the University of Missouri School of Medicine, Columbia.

Lumbar puncture revealed a cloudy spinal fluid with an opening pressure of 140 mm. The spinal fluid cell count was 393 per cubic mm. with 90 per cent polymorphonuclear leukocytes and 10 per cent lymphocytes. Gram positive diplococci were identified in a smear of the spinal fluid. Spinal fluid protein was 84 mg. per cent. Spinal fluid glucose was 56 mg. per cent. Spinal fluid culture revealed no growth after 48 hours. Repeated blood cultures were negative after 12 days of incubation. The white blood cell count was 16,700 per cu. mm. with 89 per cent polymorphonuclear leukocytes, 8 per cent lymphocytes, 1 per cent eosinophils and 2 per cent basophils. Urinalysis gave normal findings.

The patient responded to treatment with penicillin and probenecid and returned to full military duty.

The patient remained well and active for seven months, then developed cerebrospinal fluid rhinorrhea followed by acute meningitis characterized by severe right frontal headaches, chills, fever, nausea, vomiting, generalized convulsions and coma. Nuchal rigidity and bilaterally equal hyperactive reflexes were present. Marked twitching of the right side of the face was present; however, ptosis was not noted and no other localizing neurologic signs were present. Close inspection revealed some prominence of the right supra-orbital region with marked dullness to percussion over the right frontal sinus. Transillumination of the sinus was not attempted.

Lumbar puncture revealed a cloudy spinal fluid under increased pressure. The spinal fluid cell count was 4,250 per cu. mm. with 99 per cent polymorphonuclear leukocytes and 1 per cent lymphocytes. Gram positive diplococci were present in the stained smear of the spinal fluid. *Diplococcus pneumoniae* was cultured from the spinal fluid and venous blood. The patient was treated with sulfisoxazole and penicillin. Sodium amytal was used to control restlessness and convulsions. Intravenous fluids were administered to correct the marked dehydration. Temporary disappearance of fever and return to consciousness occurred within 48 hours. Antibiotic sensitivity studies revealed marked sensitivity of the *diplococcus pneumoniae* to tetracycline. Accordingly, this drug was added to the treatment regimen for the remainder of the patient's hospital stay (fig. 1).

Because of the history of recurrent cerebrospinal fluid rhinorrhea, recurrent, right facial twitching and the right frontal bone prominence, roentgenograms of the skull were taken. These films revealed a large lobulated dense eburnated area of bone filling the entire right frontal sinus and extending across the mid-line measuring 5 cm. horizontally by 4½ cm. vertically and 4 cm. in the AP diameter. This mass appeared to have eroded the posterior wall of the frontal sinus and to be projecting into the anterior cranial vault (figs. 2 and 3).

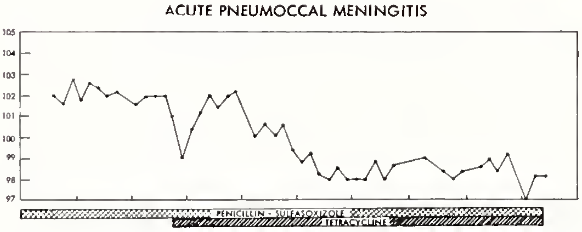

Fig. 1. Chart showing relationship of temperature to antibacterial therapy.

A right frontal osteoplastic craniotomy with removal of the frontal sinus osteoma and repair of the dura was performed. Upon reflecting the scalp flap an oblong defect approximately 1½ by 0.75 cm. was noted just above the bregma in the outer table of the skull with underlying bony tumor eroding this area. The remainder of the frontal bone appeared normal. Following elevation of the frontal bone flap the entire right frontal sinus was seen to be occupied by hard bony tumor composed of compact bone with a moderately eburnated surface (fig. 4). This tumor was attached along the supra-orbital ridge and to the outer table of the skull just superior to the defect. The frontal sinus was enlarged containing a mucocele in its lateral angle. There was no visible evidence of sinus infection. The frontal nasal duct was patent. The tumor was surrounded by a double layer of mucous membrane.

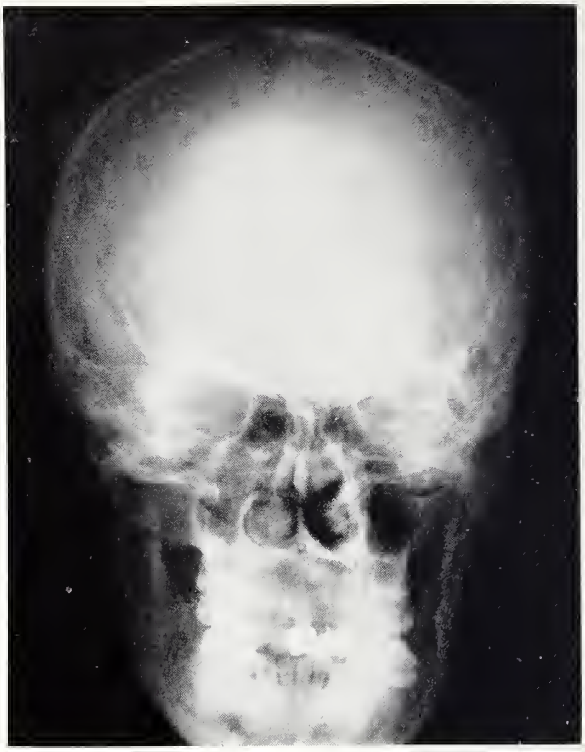

Fig. 2. X-ray showing osteoma filling the entire right frontal sinus.

Inferiorly, the supra-orbital plate beneath the right frontal sinus, the cribiform plate and the entire

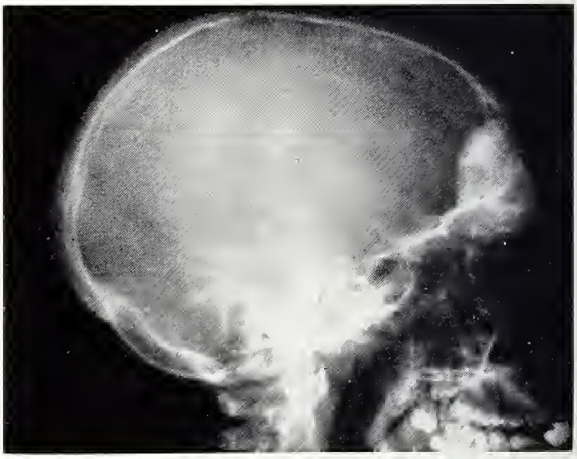

Fig. 3. X-ray showing extension of frontal sinus osteoma into the anterior cranial vault.

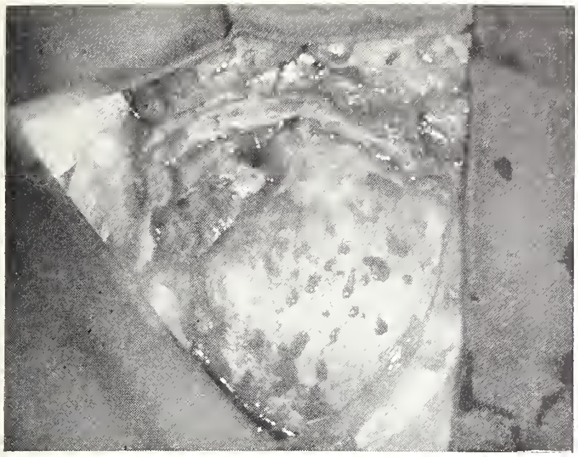

Fig. 4. Frontal bone flap removed; frontal sinus replaced by hard bony tumor.

posterior wall of the right frontal sinus was completely eroded away. The dura was densely adherent over the tip of the frontal lobe and a dural hiatus approximately 1 by 1 cm. was present, so that there was a direct connection between the frontal sinus and the pia arachnoid which appeared intact although the underlying brain was yellowed and some adhesions were present in this area. There were several other small dural defects approximately ½ cm. in size lying laterally to this larger defect. Brain pressure was normal. Inferio-medially a small corner of the tumor extended down to and appeared to communicate with the ethmoid sinus. Following removal of the tumor (fig. 5) and replacement of the frontal bone flap (fig. 6) the patient recovered promptly.

The original frontal bone flap has given excellent cosmetic results with no visible deformity of the forehead. Following discharge from the hospital the patient again developed cerebrospinal fluid rhinorrhea. Subsequent craniotomy revealed a dural defect which was successfully repaired with a graft from the fascia lata. Analeptic and antibiotic therapy has not been necessary since the repair of the dural defect. Pathologic examination of the decalcified

(Continued on page 1014)

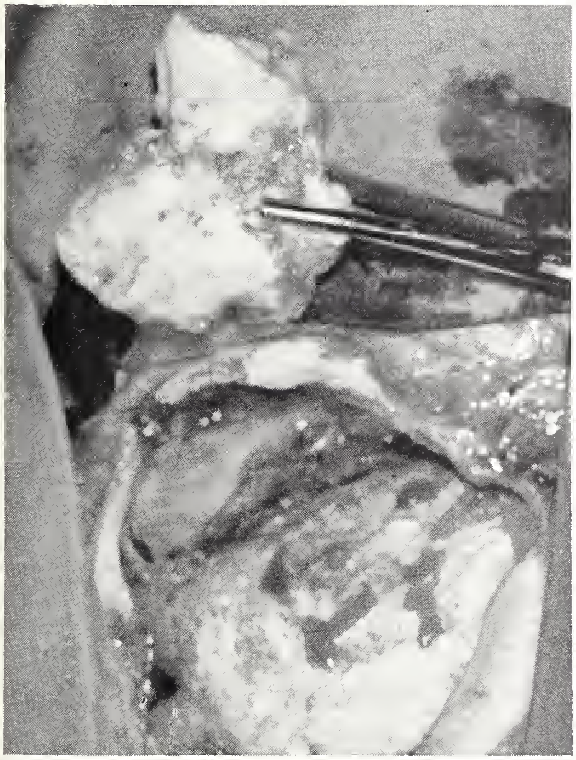

Fig. 5. Tumor and tumor bed showing compression of right frontal lobe.

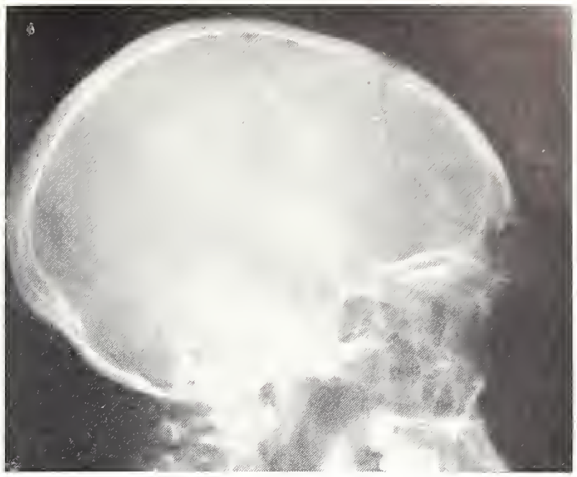

Fig. 6. Skull film after removal of tumor and replacement of frontal bone flap.

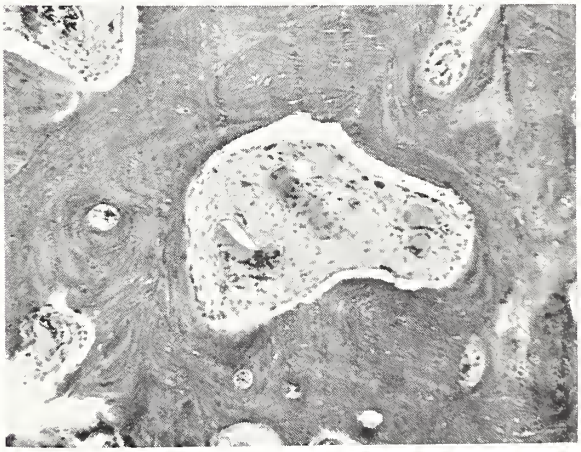

Fig. 7. This photomicrograph is representative of osteoma of the frontal sinus. It consists of numerous broad spicules of mature bone enclosing small islands of vascular fibrous marrow. x 140.

DONLIN M. LONG, M.D., *Minneapolis, Minn.*

Anesthetic Management of Patients With Trauma

The place of anesthesia and analgesia in the management of severely injured persons is discussed. Specifically discussed are preanesthetic management, premedication and analgesia, anesthetic technics, common anesthetic agents and their effects and specific wounds and indicated anesthetic agents and technics.

Dr. Long was graduated from the University of Missouri School of Medicine.

PHYSICIANS should be cognizant of the place of anesthesia and analgesia in the management of severely injured persons. In the average community, anesthesia is administered by a person with little training, be it physician or nurse. However, in the case of a total war, all physicians, even those with a paucity of anesthetic training, will have to be anesthesiologists. Often not only must they administer anesthesia, but they also must become consultants and teachers to others less trained.

The physician preparing to administer anesthesia must be a physiologist, pharmacologist, internist and surgeon as well as anesthesiologist. He should also assume responsibility for the emergency care preparatory to anesthesia and for subsequent support.

It is my aim to discuss the following topics: (1) preanesthetic management, (2) premedication and analgesia, (3) anesthetic technics, (4) common anesthetic agents and their effects, and (5) specific wounds and indicated anesthetic agents and technics. The literature since 1943 has been reviewed.

PREANESTHETIC MANAGEMENT

Presented with a traumatized patient, the anesthesiologist must substantiate and supplement the surgeon's impression, evaluate the patient for anesthesia and, because of his special knowledge, act as cardiorespiratory consultant. Often, a short history will help prevent serious mistakes. For example, the knowledge of previous narcotic administration, recent ingestion of alcohol, or serious disease may save great difficulty during anesthesia.

Also obvious is the need for a prepared emergency kit immediately available and containing (1) suction apparatus, (2) oxygen supply, (3) tracheotomy tray, (4) endotracheal tubes, bronchoscopes, airways, and (5) emergency drugs such as methoxamine hydrochloride, norepinephrine, morphine sulfate, atropine sulfate, and intravenous fluids, preferably including plasma volume expanders.

Van Bergen[3] calls the emergency care of the patient "correction of physiology" prior to the administration of anesthesia. This correction entails certain principles listed in order of urgency.

Establishing an Airway.—If an adequate airway can be assured without mechanical aids, there is no need for more elaborate measures. An endotracheal tube provides an excellent artificial airway, and also guards against aspiration. These tubes usually can be passed without

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Frontal Sinus Osteoma—Continued

tumor revealed numerous broad spicules of mature bone enclosing small islands of vascular fibrous marrow (fig. 7).

SUMMARY

A case of right frontal sinus osteoma and recurrent acute pneumococcal meningitis with roentgenologic, operative and pathologic findings is reported.

A review of the literature on frontal and ethmoid sinus osteoma and meningitis is presented.

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anesthesia in the severely injured patient. At the first indication of obstruction or retained secretions, tracheotomy should be employed. Each hospital should have anesthetic adapters which fit tracheotomy tubes and allow the use of endotracheal oxygen therapy.

Maintaining Adequate Ventilation.—Often in cranial or thoracic trauma, even after establishment of an airway, the patient does not have adequate ventilation. Correction of inadequate ventilation varies with the particular injury. For example, the sucking wound of the chest requires strapping with a pad, towel clips applied around the ribs and supported by a frame, traction and wiring or nailing using infiltration anesthesia.[4] Oxygen therapy is life saving and mandatory. In the emergency room, administration by nasal catheter is more satisfactory than administration by tent.[7] If 100 per cent oxygen is required, a mask or artificial ventilation should be used. In extreme cases, augmented or controlled respiration by mechanical ventilator is the most effective means of oxygenation, and a method not to be forgotten is mouth-to-mouth breathing. Safar[17] reports the using of two fused oropharyngeal airways for more adequate ventilation. With tidal volumes of 1,000 ml., 100 per cent peripheral oxygen saturation is obtained. He considers this the emergency method of choice. In interstitial edema occurring with blast injuries, 50 per cent glucose or serum albumin intravenously has been used successfully to relieve this condition and so provide adequate exchange of oxygen and carbon dioxide across alveolar membranes.

Correcting Impaired Circulation.—If the patient is in cardiac failure due to hypoxia, diminished cardiac inflow, or infarction, the usual methods of therapy must be applied heroically. Surgery in the acutely decompensated patient carries a high mortality, 50 to 100 per cent. Usually the trauma victim will be in shock, neurogenic or, more commonly, secondary to blood loss. Correction of shock is a necessity and, of course, hemostasis is desirable. The proper therapy for blood loss is replacement by whole blood, but rapid transfusion with large volumes of stored blood can cause citrate toxicity, a syndrome characterized by hyperkalemia, hypocalcemia and cardiac arrest in diastole. One gram of calcium gluconate intravenously for each 1,000 ml. blood is adequate treatment.

Plasma, plasma volume expanders, and other fluids may be used for temporary relief of hypovolemia. Vasopressors must be used with caution since they may reduce tissue oxygenation; methoxamine (Vasoxyl) is probably more useful than norepinephrine (Levophed) due to its greater margin of safety. The injudicious administration of norepinephrine allowing subcutaneous extravasation will cause tissue necrosis and slough. Another emergency method is abdominal aortic compression done by external or internal pressure.[6] The vessel should not be occluded for more than 30 to 45 minutes.

Trendelenberg is not the position of choice; supine or lithotomy are more advantageous to raise blood pressure. Also, the patient should not be kept unreasonably warm.[7] It was found by battlefield experience that hypothermia might even be desirable to combat shock.[8]

Maintaining Adequate Stress Reaction.—Some individuals seem to require supplementation of adrenal cortical secretions to withstand stress. Corticosteroids are helpful in these cases. Increasing vascular collapse which does not respond to the usual methods may dramatically reverse its course with the addition of a steroid to the regime. Hydrocortisone, 100 mg., in 500 cc. of 5 per cent dextrose and distilled water by continuous intravenous infusion, 100 ml. per hour, is recommended.

Preventing Vomiting Under Anesthesia.—Gastric motility ceases upon injury and may not be adequate for from 12 to 24 hours. The emptying time is delayed further if narcotics have been administered. Every patient should be treated as if he had a stomach full of food, and if the traumatized patient is capable of doing so safely, vomiting is the best way to clear the stomach. In others, the largest possible gastric tube must be passed and thorough aspiration undertaken. When neither is practical, rapid induction and endotracheal intubation is the safest procedure.[6] If this cannot be quickly effected, intubation of the esophagus with an endotracheal tube allows vomitus to be expelled. Some authorities recommend the routine use of esophageal intubation before endotracheal anesthesia is attempted. It is suggested that the correct position for a patient who is vomiting is the right lateral decubitus. This makes it more difficult for the stomach to empty. Trendelenberg position is of little use.[15]

PREMEDICATION AND ANALGESIA

The injured patient already has a depressed metabolism, thus dosage must be reduced markedly.[9] With this exception, the usual rules of premedication may be applied.

In the relief of pain, the narcotics are without equal. However, all narcotics depress respiration and cardiovascular tone, and should be used sparingly and only if clearly indicated. In the patient in shock, intravenous administration of narcotics is the mode of choice. Due to peripheral vasoconstriction, intramuscular or hypodermic injection may pool to be absorbed later and result in overdosage, if multiple injections have been given to obtain a clinical effect.[6] A supply of a narcotic antagonist should always be available. Nalline is recommended in doses of 5 to 10 mg. to combat respiratory depression of narcotic overdosage. The severely wounded person rarely needs analgesia; however, if pain is present, a narcotic should be used to control it specifically. Small increments should be used rather than a single large dose, regardless of route of administration.

If the patient is restless, 50 to 100 mg. intravenous Seconal or Nembutal may be used to good advantage without resorting to narcotics.[2]

Atropine sulfate and scopalomine hydrobromide are used to dry the tracheobronchial tree and the vagal tone. Usually, one of the belladonna derivatives will be the only premedication needed.[10] Scopalomine hydrobromide should not be used for severe pain due to its penchant for producing delirium.

ANESTHETIC TECHNICS

Inhalation.—This aids adequate ventilation, but airway or intubation may be indicated to obtain this. A supply of oxygen is always available. The choice of agents is wide and allows freedom for maneuverability during the procedure. Inhalation anesthesia is the method of choice in thoracic, abdominal and cardiovascular surgery; it is indicated in shock and for compound fractures of the upper extremities. However, inhalation anesthesia is disturbing metabolically, and the poor risk patient often can be more easily managed if another method is chosen.[1]

Local or Regional.—These technics are excellent in managing the injured patient. Local infiltration will allow most minor repairs to be done, and regional block is sufficient for nearly all surgery of the extremities. Tetracaine (Pontocaine) 0.1 per cent and 0.25 per cent, lidocaine (Xylocaine) 0.5 per cent and 2 per cent and procaine, 1 per cent and 2 per cent, are the agents recommended. Unfortunately, conduction anesthesia has fallen into disuse. In management of mass casualties, skill with conduction anesthesia will be well repaid.

Local and regional anesthesia also relieves pain or vasospasm and can do so as effectively as narcotic depression. By using the indicated sympathetic block in reflex vasospasm, an arm or leg may be spared from ischemic death and the patient freed of persistent pain.

Spinal.—Spinal anesthesia is limited to injured patients not in shock and in whom shock is not impending, because unmanageable hypotension may result. Recent reports[6] state that spinal anesthesia in skilled hands may not be as dangerous as had been thought. It still, however, leaves the maintenance of the patient a difficult task. The anesthesiologist who chooses spinal anesthesia for intra-abdominal trauma has an indefensible position.

Intravenous.—The use of barbiturates intravenously is discussed under Pentothal. There are few cases in civilian trauma in which the use of this agent as primary maintenance is justified.

ANESTHETIC AGENTS

The choice of an anesthetic agent cannot be a preconceived one for any type of injury. However, if one rule is to be prescribed, it is this: "Use that agent to which you are most accustomed."[8]

Ether.—Historically, ether has long been a satisfactory agent for use in trauma. Throughout World War II, it was the primary inhalation anesthesia used by the armed forces. Beecher states it is always the agent of choice[1] and describes it as the best agent for use in shock. He further points out that primary induction with ether is usually easy. These teachings have been accepted generally until recently when a number of critical papers have appeared. Virtue[11] reported that the use of ether in rats under shock was deleterious. By using a standard technic to produce shock, he discovered that mean survival times were significantly reduced with ether anesthesia in nonlethal amounts. This substantiated Dripps'[2] earlier observations in Korea. The sympathomimetic effects of ether, once thought to be helpful, are now suspected of increasing myocardial irritability.[3] Work by Hershey and Rovenstine[9] using dogs shocked by partial exsanguination showed ether to be the poorest agent tested. Animals anesthetized with ether withstood less blood loss (4.1 per cent) and had the highest mortality (80 per cent).

It is certain that ether can no longer be described as the agent of choice in all cases of trauma.[15]

Cyclopropane.—With cyclopropane anethesia more oxygen can be used than with nitrous oxide, respiratory irregularities are rare, metabolic effects are minimal, induction and recovery are rapid, and there is a wide margin of safety between therapeutic and lethal concentration.

However, its use in surgery of trauma is a postwar development. Recently, numerous authors have pointed out advantages of the agent for use in the shocked patient (see "Ether"). Survival times have been increased using cyclopropane in experimentally shocked rats.[11] It has been observed that cyclopropane causes less cardiac dilation than ether; it has little autonomic effect, and the danger of serious arrhythmias is much less than was previously described.[9] When indicated, cyclopropane is an excellent choice for anesthesia in the traumatized patient.

Nitrous Oxide.—This gas is used primarily in "first aid" surgery and as an ancillary with Pentothal. The principal hindrance is tissue anoxia, and its low anesthetic potency makes the use of ancillaries mandatory. However, as an analgesic or with other agents, it is quite useful.

TABLE 1

BLOOD LOSS AND SURVIVAL

	Per Cent Loss	*Survival*
No Anesthetic	5.3	92
Cyclopropane	4.8	89
Morphine	4.6	70
Ether	4.1	20
Pentothal	3.8	25

Pentothal.—In peacetime, Pentothal is limited in its application. Induction and supplementation are its chief uses, but it is a dangerous drug and must be administered carefully. Both cardiovascular and respiratory depression result from overdosage. Pentothal is not an anesthetic but a hypnotic, and analgesia is accomplished only with unconsciousness and depression of major degrees of the cortex. However, since intravenous anesthesia is an ideal method of war time or mass emergency anesthesia, it must be remembered as a primary agent. It is light, easy to transport, and easy to administer. Pentothal depresses the respiratory center's response to carbon dioxide, so to be used safely, it must be combined with oxygen or nitrous oxide and oxygen supplementation. Large doses of atropine should be used to minimize vagal reflexes. There are several contraindications to Pentothal anesthesia: narcotic overdosage, shock, cervical inflammation because of increased sensitivity of aortic and carotid reflexes, and presence of clostridial infection. It is not a good agent for use in burns or intra-abdominal trauma. In children, intramuscular Pentothal, 8 mg. per pound body weight, is an excellent dosage. Administration is simple, induction rapid, and the procedure tolerated well by most children. For procedures lasting less than one hour, its use should be considered.

Pentothal may be a useful, even the only, agent available in national disaster. Each physician should acquaint himself with its advantages, disadvantages and methods of administration.

Chloroform, Ethylene, Trichlorethylene, Ethyl Chloride, Divinyl Ether, and Other Anesthetic Agents.—These are not discussed. They offer few, if any, advantages over more standard agents and are less familiar to the average untrained anesthetist.

Fluothane.—This new and potent anesthetic is rapidly becoming available. Only a small amount is needed for anesthesia, the total inhalation concentration usually being less than 1 to 2 per cent by volume. Induction is rapid and without undesirable effects. In many ways, it is an ideal agent; however, it is expensive, requires precision instruments for use, and is prone to produce hypotension.

Ancillaries.—Muscle relaxants are of great use in trauma. They bring adequate tissue pliability with the lightest possible plane of anesthesia. Routine use requires experienced personnel, usually endotracheal intubation, and a method of positive pressure oxygenation. The margin between respiratory muscle paralysis and adequate relaxation is small. Ancillaries should be used with care with ether, in children and old persons, in patients with myasthenia gravis, and in persons with histories of allergy.

SPECIFIC WOUNDS AND ANESTHESIA

The technics employed in anesthesia for trauma are no different from those of routine surgery. The method chosen must consider location, extent and effect of the injury present. No arbitrary rules of specific technic for particular wounds may be prescribed.[8]

First Aid Injuries.—These are such wounds as require ligation, amputation or reduction of fractures, for example. Simple analgesia is often enough in severe trauma. Do not use general anesthesia unless there is a specific indication. These injuries offer an excellent place for the use of intramuscular Pentothal in children. Using this technic, anesthesia for minor wounds is easily accomplished.[2, 6, 12]

Head and Neck.—If at all possible, local anesthesia should be used. Short intracranial procedures are easily accomplished with infiltration using procaine, Xylocaine and Pontocaine. Intracranial injury or other injuries that obstruct ventilation should be handled with anesthesia and with establishment and maintenance of an artificial airway.

Intrathoracic.—Paravertebral or intercostal blocks are valuable technics to remember. However, the choice is usually general anesthesia with an artificial airway. In this way, hypoventilation with the resultant syndrome of carbon dioxide rise, hypotension with emergence, and cardiac arrest is avoided.[6, 12]

Intra-abdominal.—A gastric tube should always be used. It is safest to intubate the trachea and rapidly induce any patient suspected of having a full stomach. Muscle relaxants may be used with safety if used sparingly and when indicated. If speed is desirable, Pentothal induction is more rapid than induction with inhalation agents. Intra-abdominal irritation may unduly prolong induction with any inhalation agent.[6, 12]

Upper Extremity.—Brachial block is one of the most useful technics. If local anesthesia is not feasible, any general technic will suffice.[6, 12]

Lower Extremity.—Conduction technics, other than spinal, are more difficult than in the arm. Combined femoral and sciatic block have been used without marked success. A general anesthetic usually is indicated. If no contraindications exist, spinal or peridural technics may be used advantageously, especially when muscle relaxation is required.

Burns.—Burned patients present several specific problems. They are usually in pain, and usually are highly susceptible to narcosis. If the burns have been about the head and neck, glottic edema may ensue and embarrass the patient's ventilation. The maintenance of fluid balance is most important in these individuals.

For the primary excision, general anesthesia is the choice. Pentothal and nitrous oxide are used to keep the patient in the lightest stages of analgesia; cyclopropane is also useful. Respirations must always be spontaneous, if possible. In later surgery, the only precept that changes is that of dosage. Burn patients adjust to fantastic amounts of anesthesia and narcotics without apparent effect.[13]

Irradiation.—The actions of anesthetic agents in radioactive or electromagnetic irradiation injury have been subjected to little study. Clinical experience is scarce but suggests there may be no major effects. Burdick reported that x-radiation followed by Pentothal anesthesia significantly reduced 30 days survival in rats as compared with those receiving radiation and other common agents. Wilson[15] has repeated this work more extensively and finds no change in mortality or survival time with the use of any anesthetic agent. His only finding of note was a decreased tolerance to cyclopropane following midlethal x-radiation.

Trauma and Acute Alcoholism.—The primary dangers here are (1) aspiration and (2) ease of overdosage. It must be remembered the patient has a circulating drug that reduces the amounts of anesthetic required. However, conversely, the confirmed alcoholic may be quite tolerant of heavy anesthetic doses.

IMPROVISATION AND RESEARCH

The problems unsolved in emergency anesthesia are numerous. There is no single analgesic without undesirable side effects. It is in the case of mass casualties, and wartime trauma that the greatest challenges lie. No great improvement in technics or equipment has been made since the end of World War II except the introduction of fluothane and muscle relaxants. Recently, Ruben devised a respirator using room air that allows intubation, the use of muscle relaxants, and all the advantages of hospital anesthesia. In an earlier paper, he described a foot-driven suction that functions adequately.[14] There is a recent article describing the use of inhalers such as the Duke type for administration of various agents; for example, trichlorethylene, ether, cyclopropane and nitrous oxide, and preliminary reports are encouraging. This would seem to be a feasible and safe method for anesthesia of mass casualties.

While in peacetime, under normal conditions, improvisation is to be condemned, it is obvious that in case of national emergency routine technics will not suffice. New equipment, easily portable, is a necessity.

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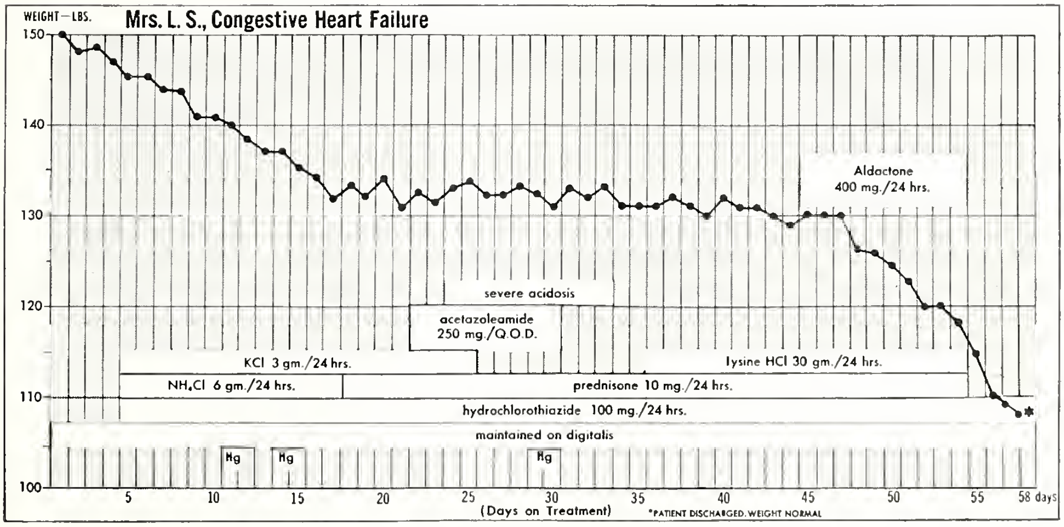

Mrs. L. S., Congestive Heart Failure

FRANK J. MANGANARO, M.D., ***St. Louis***

Hypersensitivity Necrotizing Angiitis

Report of a Case

The difficulty in the recognition of hypersensitivity necrotizing angiitis is discussed, together with the enigma of the "collagen diseases" and their relationship to hypersensitivity. A case report is presented and discussed.

Dr. Manganaro is a graduate of Creighton University School of Medicine, Omaha, and restricts his practice to internal medicine.

The recognition of hypersensitivity necrotizing angiitis is difficult.[1] If the diagnosis is made early it is possible to cure the disease. There has been a tendency to group this disease and other related diseases as simply manifestations of one pathologic process, the so-called collagen diseases. Blankenhorn and Knowles[2] believe that primary periarteritis nodosa and hypersensitivity angiitis can be differentiated clinically and emphasize that it is important to do so. In the former, therapy with adrenocorticotropin or corticosteroids may be harmful; whereas, in the latter it may be life-saving.

Case Report

Mr. P. S., a 54 year old white man, was admitted to the hospital on August 13, 1958. He was seen in the office on August 6, with a two week history of migratory arthralgia and marked tenderness of the plantar surfaces of the feet. The arthralgia started in the joints of the feet and ankles, then involved the knees, hands, jaw, back and chest respectively. At no time did he notice any swelling or redness of the painful joints. About one week after the onset, the patient had daily elevations of temperature of 102 F. He also noted malaise, anorexia, at times generalized myalgia, an unproductive cough and dyspnea not necessarily related to effort.

The physical examination done in the office revealed a patient who was acutely ill. The cardiac rate was 100 per minute and regular. The heart sounds were somewhat distant. The lung fields were clear. The liver was enlarged two fingers breadth below the right costal margin. It was firm and nontender. Careful scrutiny was made of all the joints. I could not find any redness, warmth or swelling of any joint. The balls of the feet, especially the plantar surface of the left great toe, were extremely tender. Remainder of the examination was normal.

Laboratory examinations done in the office were: Hb. 15.0 G.; hematocrit 44; white blood count 15,000 with 4 eosinophils, 2 monocytes, 2 stabs, 83 segmented neutrophils, 9 lymphocytes; urinalysis showed faint traces of albumin, 8 to 10 white blood cells per high power field and an occasional red blood cell; uric acid 3.5 mg. per cent. A roentgenogram of the chest was normal except for some elongation of the aortic arch. An electrocardiogram was within normal limits and showed no change from a previous record taken on April 23, 1957.

Pertinent to the present illness and the subsequent course was the past history. On April 18, 1957, some 15 months earlier, the patient was seen in the office with a clinical history and findings compatible with a left subdeltoid bursitis. X-ray examination of the left shoulder girdle was negative for arthritis or calcification of the bursa. The subdeltoid bursa was injected with 20 mg. of a local acting corticosteroid. There was an excellent immediate response. No other medication was given. Four days later, however, he returned to the office with a recurrence of the left shoulder pain. He stated that he had been painting at home and the next day both wrists also became painful, red and swollen. When seen in the office on April 23, 1957, both wrists were swollen, red, warm and painful on active and passive motion. There were no other abnormal physical findings.

Laboratory studies were as follow: Hb. 15.0 G.; white blood count 9,400 with 2 eosinophils, 75 segmented neutrophils, 22 lymphocytes, 1 monocyte; urinalysis showed 10 to 15 pus cells, some in occasional clusters, and a rare red blood cell per high power field; sedimentation rate 42; uric acid 6.6 mg. per cent. X-ray studies of the chest and upper gastrointestinal tract were not remarkable except for some elongation of the aortic arch. A diagnosis of acute gouty arthritis was made. He was given phenylbutazone 400 mg. daily and an analgesic containing codeine, aspirin compound and phenobarbital for relief of pain. There was rapid improvement.

On May 6, 1957, the pain the left wrist recurred. This time he was given a combination of meprobamate and prednisolone and probenecid 0.5 G. daily. He was urged to come to the office once a month for control of the blood uric acid level. He did not return, however, until August 8, 1958, two weeks after the onset of the terminal illness. During this 15 month period, the patient treated himself using both the phenylbutazone and probenecid as he saw fit. The drugs were dispensed by his pharmacist without confirmation from me. During the two weeks before I saw him he apparently took the probenecid in doses up to 2 G. daily, in addition to the phenylbutazone and aspirin in fairly large doses.

The patient was urged to go to the hospital on August 6, 1958, but he declined. Despite the normal blood uric acid, I considered that he probably had an unusual manifestation of gouty arthritis. He had taken three drugs, all of which are known uricosuric agents. He was given 40 units of adrenocorticotrophin zinc, 20 mg. of prednisolone, meperidine hydrochloride because of the severe pain of the balls of the feet (the most important subjective complaint during the entire course of the illness) and a barbiturate for sleep. He was seen on each of the next two days and was much improved. On August 11, the symptoms recurred but he still refused to enter the hospital. However, by August 13, he became much worse and he was hospitalized.

Hospital Course.—The initial impressions were rheumatoid arthritis, acute rheumatic fever, subacute bacterial endocarditis or a "collagen disease."

Laboratory studies: Hb. 11.7 G.; hematocrit 35; white blood count 16,200 with 8 stabs, 73 segmented neutrophils, 10 lymphocytes, 6 monocytes, 3 eosinophiles; urinalysis normal; serum bilirubin, one minute 0.4 mg., 30 minutes 0.75 mg.; alkaline phosphatase 3.2 sigma units; CCF test negative, 24 and 48 hours; agglutination tests for typhoid, paratyphoid, proteus all negative; total protein 6.3 G.; albumin 3.2 G., globulin 3.1 G.; sulfobromophthalein sodium retention 44 per cent in 30 minutes, 37 per cent in 45 minutes; urine culture, no growth after 24 hours; fasting blood sugar 90 mg. per cent; non-protein nitrogen 42 mg. per cent; stool examinations for blood, ova and parasites negative; stool culture negative. Numerous blood cultures were done. All were negative except one which grew a nonhemolytic, coagulase negative staphylococcus, a probable contaminant. Several L. E. preparations were studied and were negative. On the day after admission a roentgenogram of the chest was done and was reported negative. Meanwhile, there was a progressive rise in the white count, ranging from 17,100 to 32,350, and the differential showed a marked left shift with as many as 50 stabs on one occasion. In addition, the neutrophils showed marked toxic granulation and were phagocytizing red blood cells. In seven blood counts done, the eosinophils were 3 per cent or less except on one occasion when they numbered 6 per cent.

Initial therapy consisted only of analgesics for pain. Though the patient complained of generalized myalgia and arthralgia, the most distressing symptom was still marked pain and tenderness of the plantar surfaces of both feet. He was unable to walk to the toilet without severe pain of these areas. Even gentle pressure of the bed sheet caused pain. Prednisolone, 20 mg. daily, was given for two days, but without relief. The fever was remittent in type with elevations to 102 F. daily.

On August 18, because the clinical picture most resembled a probable septicemia, the prednisolone was discontinued and the patient was given chloramphenicol, 250 mg. every six hours. Penicillin was not used at the onset of the therapy because of a possible history of sensitivity. The next day novobiocin in addition and in the same dosage was given. On August 19, a repeat roentgenogram of the chest revealed a definite increase of about 2 cm. of the cardiac shadow and there was prominence of the bronchovascular markings suggesting a myocarditis. A roentgenogram of the abdomen was compatible with a paralytic type ileus. An electrocardiogram showed a first degree auriculoventricular block and sinus tachycardia. The admission electrocardiogram had been within normal limits. There was no response to the antibiotics given and because subacute bacterial endocarditis was a definite possibility, 1,600,000 of penicillin was given every six hours. This was on the sixth hospital day. At that time, the fourth and fifth toes of the left foot were noted to be cyanotic, extremely tender and cool to touch. The nail beds of the fingers were somewhat dusky. The cardiac rate was 108 per minute and for the first time he developed a faint apical systolic murmur. The lungs were clear.

Consultation with another internist was obtained. It was his opinion that the clinical picture was most compatible with an infection, possibly subacute bacterial endocarditis, or even acute bacterial endocarditis. He also suggested the possibility of a collagen disease with local areas of vasculitis producing the cyanosis of toes and, least likely, lupus erythematosis. On August 20, the patient developed a diffuse maculopapular rash of the entire back. Both the consultant and I felt this rash was probably due to a drug sensitivity. The patient's general condition worsened from serious to critical. Severe tenderness of the balls of the feet along with cyanosis of the toes has been described in meningococcemia. Since the antibiotics used up to this time were ineffective, he was given 5 G. sodium sulfadiazine in 1000 ml. of fluid intravenously on August 21, and 2 G. daily through August 25. Penicillin was continued but the chloramphenicol and novobiocin were discontinued. An electrocardiogram was within normal limits.

The next important changes in the clinical picture were abdominal distension without localized pain and erythematous streaks along the dorsal aspect of the left foot to the level of the ankle from the base of the fourth toe. Later that evening there was an unmistakable friction rub at the left border of the lower sternum. The patient became apprehensive, at times somewhat agitated. This was a significant change from his usual mild manner. He was given 40 units of adrenocorticotrophin parenterally and triamcinalone 4 mg. by mouth every six hours. After 24 hours there was no change. On August 26, the patient showed signs of occasional periods of confusion and there developed oliguria. The urine was checked for sulfadiazine crystal but was negative. It contained 1 plus protein, 4 to 5 white blood cells and 4 to 5 red blood cells. The nonprotein notrogen was 133 mg. per cent.

Consultation with a third internist was obtained. It was his opinion that the clinical picture best fit a general system disease such as acute rheumatic fever or a collagen disturbance. He also suggested a muscle biopsy if the patient should improve. However, about 1:00 a.m. of August 27, the patient developed acute pulmonary edema and hypotension. He was given morphine sulfate and aminophyllin with some relief. A unit of whole blood was started. An electrocardiogram revealed the diffuse changes commonly attributed to hyperkalemia, viz., first degree A-V block, marked widened QRS, tall peaked T waves and a shortened QT interval. The blood was discontinued and 500 cc. of molar lactate solution was given in one vein, and 10 per cent dextrose and water with 30 units of regular insulin in another vein. About seven hours later, the electrocardiogram showed considerable improvement. The blood electrolytes on the morning of August 27 were sodium 131, potassium 8.4, chloride 80, and CO2 18.8 mEq. Because of the possibility of a still reversible kidney failure, the patient was transferred to another hospital with facilities for the use of an artificial kidney. However, because of technical difficulties, the artificial kidney was not used and the patient expired five days later, about five and one half weeks after the onset of the initial symptoms.

Autopsy Findings.—Autopsy showed necrotizing angiitis in kidneys, heart, liver, spleen, pancreas, colon, urinary bladder and skeletal muscle; acute and subacute necrotizing glomerulitis; necrotizing colitis; multiple small acute and subacute infarcts of the myocardium; minute thrombotic vegetations on the mitral valve; fibrinous pericarditis; myocardial hypertrophy (495 G.); thrombosis of the medium sized renal veins; thrombi in the large and medium sized rami of the splenic artery with multiple infarcts of the spleen; pericholangitis; multiple small infarcts of the pancreas with focal fibrosis and focal atrophy; focal necrosis of the adrenal cortex; marked depletion of adrenal cortical lipid; gangrene of the terminal phalanx of the left fourth toe; slight hemosiderosis of the liver; acute laryngotracheobronchitis; congestion of the lungs and liver; erosions of the esophageal mucus; multiple unhealed sutured incisions over vessels of the extremities; arteriosclerosis of the abdominal aorta, advanced; of the thoracic aorta and coronary arteries, moderate; and of the hepatic, splenic, superior mesenteric and renal arteries, slight. It was the opinion of the pathologist that the lesions corresponded to those of the disease termed hypersensitivity angiitis by Zeek.[3]

DISCUSSION

There is still a tendency to group all conditions in which there are vascular lesions characterized by fibrinoid necrosis and inflammatory reaction under the general term "collagen disease." Among these are: disseminated lupus erythematosis, dermatomyositis, periarteritis nodosa, scleroderma, scleredema, hypersensitivity angiitis, rheumatic arteritis, temporal arteritis, allergic granulomatous angiitis, rheumatoid arthritis, dermatitis herpetiformis, sarcoidosis, Felty's, Reiter's and Cogan's syndromes. Zeek[3] as a result of more than 20 years study of this pathologic process has emphasized that these lesions do not represent one pathologic entity. The problem has been which of these collagen diseases is due to allergy and hypersensitivity and which have other causes, since anatomically the entire group has similar features. Knowles et al.[1] studied 35 cases of periarteritis nodosa and 10 cases of hypersensitivity angiitis. They noted definite differences in the length of illness and symptomatology. They also divided the cases of periarteritis nodosa into two types designated primary and secondary. The later were primarily cases of renal disease in which some of the lesions of periarteritis occurred, usually a short time before death. The cases they designated primary periarteritis nodosa were characterized by a long clinical course manifested by hypertension, peripheral neuropathy, gastrointestinal symptoms and eosinophilia. In neither the primary nor the secondary forms was there unequivocal evidence of allergy or ingestion of drugs known to produce hypersensitivity reactions. The 10 cases of hypersensitivity angiitis were strikingly different clinically. The course of the illness was fulminating characterized by fever, skin rash, nephritis, myocarditis and in seven cases a history of recent sulfonamide ingestion. In the cases of primary periarteritis nodosa uremia (nonprotein nitrogen exceeding 80 mg. per cent) was absent. Clinical uremia was the rule in secondary periarteritis nodosa and common in hypersensitivity angiitis.

These authors stressed the fact that periarteritis nodosa and hypersensitivity angiitis represent two distinct disease entities which can be differentiated clinically. The implications of this concept are important, especially since the diagnosis can often be made by muscle biopsy. There is evidence that corticosteroid therapy may aggravate the course of periarteritis nodosa.[4] That cortisone may be beneficial when there is evidence of hypersensitivity was reported by Frankel and Rothermich.[5]

I will cite only two more recent reports[6, 7] of dramatic improvement of periarteritis nodosa when treated with corticosteroids. In one case[6] there was no history of hypersensitivity, while in the other[7] penicillin was felt to be the allergic agent. Since Rich's[8] work, numerous case reports of sensitivity associated with the lesions of periarteritis nodosa have appeared.

Rose,[9] in a discussion on hypersensitivity and the collagen diseases at the Royal Society of Medicine, stated that there was no good evidence to incriminate drugs, especially sulfonamides in the etiology of periarteritis nodosa. It was not always clear whether in the cases reported the drug treatment had really preceded the true onset of the disease or whether exacerbations were consistently produced by the drug. In a survey of 111 cases, Rose reached tentative conclusions: The infection itself, and not the drug used in treatment, was the probable cause of the onset of the disease in these cases. Where sulfonamides were apparently associated, it was usually because of a respiratory infection that they were used. A disproportionately high incidence of rheumatic fever or a history of it in his series (12 per cent) supported the etiologic role of the streptococcus.

It would seem that the problem of hypersensitivity in the etiology of necrotizing angiitis is not yet resolved. The concept of Knowles et al.[1] in which periarteritis nodosa and hypersensitivity angiitis are considered two distinct diseases, the clinical courses of which are different, is certainly a useful one to the clinician. Awareness and the utilization of muscle biopsy early in the course of a suspected case will yield better therapeutic results. It is noteworthy, however, that despite their wide knowledge of these diseases, Blankenhorn and Knowles[2] did not take muscle biopsies on any of the 10 cases of hypersensitivity angiitis because the disease was fulminant and not recognized.

The clinical aspects of the case herein reported are somewhat puzzling. Several of the drugs used, both before and after the onset of symptoms, have been known to cause sensitivity reactions. Phenylbutazone and chloramphenicol have been most often associated with the development of malignant granulocytopenia or aplastic anemia. Penicillin and sulfadiazine have been most associated with serum sickness-type disease and necrotizing angiitis. Neither of these were used until after the disease was well advanced. Both ACTH and prednisolone were used when he was first seen, some two weeks after the onset of symptoms. There was noticeable subjective and objective improvement for four days, followed by rapid relapse despite the continuation of these drugs for an additional three days. A "collagen disease" was listed on the admission note as one of the possibilities. However, I considered a severe infection, particularly an endocarditis, most likely and therapy was given accordingly. Prednisolone in therapeutic doses was given for two days prior to the antibiotics, but without noticeable effect.

Certainly, a muscle biopsy should have been done shortly after admission when the patient was still in good enough condition. The diagnosis of "collagen disease" was a consideration throughout the entire course of the illness. The adage in clinical medicine that, if one thinks of bacterial endocarditis, one should treat the patient for it despite early negative blood cultures, was the dominant thinking. In contrast to some of the cases reported, there was no dramatic sustained response to the corticosteroids. There are case reports of almost spectacular immediate results with equivalent doses of cortisone alone. That sulfadiazine was probably not the sensitizing agent, if there was one, is attested to by the fact that the disease was already in its fourth week when this drug was used. The onset of the uremia was rather sudden and went unrecognized until a friction rub developed. After this the course was rapidly fatal and uremia was the cause of death.

An unusual feature in this case was the severe necrotizing colitis which is uncommon in hypersensitivity angiitis but is common in periarteritis nodosa. The massive infarction of the spleen was of "several weeks" duration according to the pathologist. Yet patient never did localize the abdominal pain to this area.

SUMMARY

A case of hypersensitivity angiitis is presented. The enigma of the "collagen disease" and relationship to hypersensitivity is briefly discussed.

I gratefully acknowledge the help of Dr. John Neutzel in the management of this case.
Dr. John Meyer performed the autopsy.

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A. W. NEILSON, M.D., ***St. Louis***

A.M.A. Annual Session

Special Article

In addition to the Delegates, alternate delegates Guy N. Magness, University City, and Rolla B. Wray, Nevada, were present. Also present were R. O. Muether, M.D., St. Louis, President, Missouri State Medical Association; Jacob H. Summers, M.D., Lebanon, President-elect; Alphonse McMahon, M.D., St. Louis, a member of the A.M.A. Council on Scientific Assembly; James R. McVay, Kansas City, former member of the A.M.A. Board of Trustees; W. J. Shaw, M.D., Fayette, former alternate delegate. Mrs. Jordan Kelling, Waverly, President of the Woman's Auxiliary to the Missouri State Medical Association, attended the annual session of the Woman's Auxiliary.

Executive Secretaries from Missouri in attendance were John R. Buckner, of Greene County Medical Society; Hollister Smith, of the St. Louis Medical Society; T. R. O'Brien and Ray McIntyre of the Missouri State Medical Association staff.

Health care for the aged, pharmaceutical issues, occupational health programs, relations with allied health groups and relations with the National Foundation were among the major subjects involved in policy actions by the House of Delegates at the American Medical Association's 109th Annual Meeting held June 13-17 in Miami Beach.

Dr. Leonard W. Larson, Bismarck, N. D., former chairman of the A.M.A. Board of Trustees and of the A.M.A. Commission on Medical Care Plans, was named president-elect by unanimous vote. Dr. Larson will succeed Dr. E. Vincent Askey of Los Angeles as president at the Association's annual meeting in June, 1961, at New York City.

The A.M.A. 1960 Distinguished Service Award, one of medicine's highest honors, was given to Dr. Charles A. Doan, who will retire next year as dean of the Ohio State University College of Medicine and director of the Health Center in Columbus, Ohio.

Total registration through Thursday, with half a day of the meeting still remaining, had reached 19,107, including 8,706 physicians.

Report of the Missouri Delegates to the A.M.A.: Durward G. Hall, Springfield; H. E. Petersen, M.D., St. Joseph; Richard H. Kiene, Kansas City; A. W. Neilson, St. Louis.

HEALTH CARE FOR THE AGED

After considering a variety of reports, resolutions and comments on the subject of health care for the aged, the House of Delegates adopted the following statement as official policy of the American Medical Association:

"Personal medical care is primarily the responsibility of the individual. When he is unable to provide this care for himself, the responsibility should properly pass to his family, the community, the county, the state, and only when all of these fail, to the federal government, and then only in conjunction with the other levels of government, in the above order. The determination of medical need should be made by a physician and the determination of eligibility should be made at the local level with local administration and control. The principle of freedom of choice should be preserved. The use of tax funds under the above conditions to pay for such care, whether through the purchase of health insurance or by direct payment, provided local option is assured, is inherent in this concept and is not inconsistent with previous actions of the House of Delegates of the American Medical Association."

The House also urged the Board of Trustees "to initiate a nonpartisan open assembly to which all interested representative groups are invited for the purpose of developing the specifics of a sound approach to the health service and facilities needed by the aged, and that thereafter the American Medical Association present its findings and positive principles to the people."

In connection with an educational program regarding the aged, the House declared that "the American Medical Association increase its educational program regarding employment of those over 65, emphasizing voluntary, gradual and individualized retirement, thereby giving these individuals not only the right to work but the right to live in a free society with dignity and pride."

Earlier, at the opening session, Dr. Louis M. Orr, retiring A.M.A. president, had asked the House to go on record favoring more jobs for the aged, voluntary retirement and a campaign against discrimination because of age, whether it be 40 or 65. The House also gave wholehearted approval to Dr. Askey's urging that state medical societies take an active part in state conferences and other planning activities preceding the January, 1961, White House Conference on Aging.

Pharmaceutical Issues

In the pharmaceutical area the House took two actions—one regarding mail order drug houses and the other involving the development and marketing of pharmaceutical products.

The House agreed with representatives of the pharmacy profession that the unorthodox practice of mail order filling of prescription drugs is not in the best interest of the patient, except where unavoidable because of geographic isolation of the patient. The statement pointed out that in this process the direct personal relationship, which exists between the patient-physician-pharmacist at the community level and which is essential to the public health and the welfare of patients, is lost.

The House also directed the Board of Trustees to request the Council on Drugs and other appropriate Association councils and committees "to study the pharmaceutical field in its relationship to medicine and the public, to correlate available material and, after consultation with the several branches of clinical medicine, clinical research and medical education and other interested groups or agencies, submit an objective appraisal to the House of Delegates in June, 1961." The statement pointed out that certain proposals have been made which, if carried out, might impair the future of pharmaceutical research and development, thus retarding the progress of scientific therapy. It also said that the services of the pharmaceutical industry are so vital to the public and to the medical profession that an objective study should be made.

Occupational Health Programs

The House approved a revised statement on the "Scope, Objectives and Functions of Occupational Health Programs," which was originally adopted in June, 1957. The new statement contains no fundamental alterations in A.M.A. policy or ethical relationships, but it adds important new material on the following points:

1. Greater emphasis on the preventive and health maintenance concepts of occupational health programs.
2. A more positive statement of organized medicine's obligation to provide leadership in improving occupational health services by part-time physicians in small industry.
3. Increased emphasis on rehabilitation of the occupationally ill and injured.
4. Inclusion of the proper use of immunization procedures for employees, as approved by the House in 1959.
5. A more adequate statement on the need for teamwork with lay industrial hygienists in tailoring each occupational health program to the particular employee group involved.

In approving the revised guides for occupational health programs, the House also accepted a suggestion that the A.M.A. Council on Occupational Health undertake a project to study and encourage the employment of the physically handicapped.

Allied Health Groups

The House approved the final report of the Committee to Study the Relationships of Medicine with Allied Health Professions and Services and commended it as "a monumental work." The report covers the present situation, future implications and recommendations, including guiding principles and approaches to activate physician leadership. The House strongly recommended that A.M.A. activity in this vitally important area be continued and it approved the appointment of a Board of Trustees committee to carry on the work.

To develop physician leadership in promoting cooperative efforts with allied health professions and services, the report suggested the following A.M.A. activities:

1. A General conference should be held with allied scientists in the basic medical sciences and related disciplines for discussions of matters of common concern related to the creation of permanent, cooperative activities.
2. Specific exploratory conferences should be held with members of segments of science allied to a given area of medical practice with the national medical organizations concerned.
3. General and specific conferences should be held with professional and technical assistants on education, recruitment and coordination of contributions.

4. Through meetings and publications, reciprocal exchange of information should be provided between physicians and allied scientists and members of health professions.

5. Effective, continuing liaison should be established between A.M.A. representatives and professional and technical personnel.

NATIONAL FOUNDATION

The House took two actions involving relations between the medical profession and the National Foundation. It adopted a statement of policies for the guidance of state medical associations and recommended that they be adopted by all component medical societies. These policies cover such subjects as membership of medical advisory committees at the chapter level, the function of these committees, and basic principles concerning financial assistance for medical care, payment for physicians' services and physicians' responsibilities for constructive leadership in medical advisory activities.

In another action the House directed the Board of Trustees to authorize further conferences with leaders in the National Foundation on the problem of poliomyelitis as it relates to the betterment of the public health and to consider further joint action toward the eradication of polio. The House commended the National Foundation for its outstanding service in the attack against polio, but pointed out that much work remains to be done in public education, vaccination, continuing assistance for polio victims and continued research.

MISCELLANEOUS ACTIONS

In dealing with reports and resolutions on a wide variety of other subjects, the House also:

Strongly reaffirmed its support of the Blue Shield concept in voluntary health insurance and approved specific recommendations concerning A.M.A.-Blue Shield relationships.

Approved a contingent appointment of not more than six months for foreign medical school graduates who have been accepted for the September 1960, qualification examination.

Agreed that the American Medical Association should sponsor a second National Congress on prepaid health insurance.

Approved a Board of Trustees request to the Postmaster General for a stamp commemorating the Mayo Brothers.

Decided that the establishment of a home for aged and retired physicians is not warranted at this time.

Approved the establishment of a new "Scientific Achievement Award" to be given to a nonphysician scientist on special occasions for outstanding work.

Approved the following schedule for future annual meetings: Atlantic City, 1963; San Francisco, 1964, and New York City, 1965.

Approved the objectives of the A.M.A. Commission on the Cost of Medical Care established by the Board of Trustees and headed by Dr. Louis M. Orr, immediate past president of the Association.

Urged individual members of the Association to take a greater interest and more active part in public affairs on all levels.

Reaffirmed its opposition to compulsory inclusion of physicians under Title II of the Social Security Act and recommended immediate action by all A.M.A. members who agree with that position.

Called for a review of existing and proposed legislation pertaining to food and color additives, with the object of supporting appropriate measures which are in the public interest.

Urged reform of the federal tax structure so as to return to the states and their political subdivisions, their traditional revenue sources.

Asked state and county medical societies to make greater use of A.M.A. recruitment materials in presenting medicine's story to the nation's high schools.

Requested the Board of Trustees to initiate a study of present policy regarding the required content and method of preparing hospital records.

Commended the Department of Defense and the Air Force for establishing and operating the Aeromedical Transport Service and urged that it be maintained at optimum efficiency.

Directed the Board of Trustees to develop group annuity and group disability insurance programs for Association members.

Expressed grave concern over the indiscriminate use of contact lenses.

ADDRESSES AND AWARDS

Dr. Orr, in his final report to the House at the opening session, urged medical societies to "adopt" rural villages, cities and regions in underdeveloped parts of the world and to send them medical, clinical and hospital supplies.

Dr. Askey, in his inaugural address Tuesday night, declared that medicine faces its greatest challenge in the decade ahead, adding that physicians must prove the effectiveness of medicine practiced in a free society. Dr. John S. Millis

(Continued on page 1055)

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R. O. Muether, M.D.

President's Message

Reports, resolutions and discussion of the health care of the aged occurred at the Annual Session of the American Medical Association. The following statement was issued as the official policy of the Association:

"Personal medical care is primarily the responsibility of the individual. When he is unable to provide this care for himself, the responsibility should properly pass to his family, the community, the county, the state, and only when all these fail, to the federal government, and then only in conjunction with the other levels of government, in the above order. The determination of medical need should be made by a physician and the determination of eligibility should be made at the local level with local administration and control. The principle of freedom of choice should be preserved. The use of tax funds under the above conditions to pay for such care, whether through the purchase of health insurance or by direct payment, provided local option is assured, is inherent in this concept and is not inconsistent with previous actions of the House of Delegates of the American Medical Association."

The Board of Trustees was urged "to initiate a non-partisan open assembly to which all interested representative groups are invited for the purpose of developing the specifics of a sound approach to the health service and facilities needed by the aged, and that thereafter the American Medical Association present its findings and positive principles to the people."

An education program was discussed and the House stated that "the American Medical Association increase its educational program regarding employment of those over 65, emphasizing voluntary, gradual and individualized retirement, thereby giving these individuals not only the right to work but the right to live in a free society with dignity and pride."

R. O. Muether M.D.

EDITORIALS

NUMBER OF PHYSICIANS INCREASES

The physician population of the United States and its possessions increased approximately 4,769 in 1959, the Council on Medical Education and hospitals of the American Medical Association reported. There were 8,269 new physicians licensed, and there were 3,500 physicians who died during the year. This was an increase of 660 over the gain reported in the previous year. Of the 8,269 new physicians, 1,626 were foreign trained.

The number of physicians registered in 1959 was 16,068, the greatest number in 56 years.

AMERICAN MEDICAL EDUCATION FOUNDATION

The American Medical Education Foundation recently announced grants totalling $34,896 to Missouri's three medical schools.

Nationally, AMEF earmarked $1,198,287 in unrestricted grants to go to the country's 85 medical schools this year. This record total exceeds by 17 per cent the amount allocated last year by AMEF as a result of contributions received from private physicians and medical groups.

Grants by AMEF—the medical profession's own fund-raising organization now in its tenth year—do not, of course, tell the complete story of physician giving.

For one thing, many physicians send gifts directly to their alma maters. Such gifts represent slightly more than $3 million, according to a recent tabulation.

Neither does the AMEF figure reflect the value of thousands of teaching hours contributed annually to the various medical schools by practicing physicians.

At the same time, the 1960 AMEF grants of $1.2 million do represent an impressive and significant total. And, as AMEF president, Dr. George F. Lull, points out, donations to the foundation have shown a steady climb each year since it was organized in 1950. During that time, more than $9 million has been distributed by AMEF—thanks to more doctors giving more every year.

With this record, AMEF's parallel organization, the National Fund for Medical Education (NFME), is able to point to physicians' substantial support of medical education when soliciting gifts from philanthropic business leaders and corporations.

Result: This year, the National Fund is able to provide grants to American medical schools totaling $3.2 million. Of this amount, the medical schools of St. Louis University, the University of Missouri and Washington University will receive $106,602.

This October, the Missouri State Medical Association will again observe "Missouri AMEF Month," a concentrated campaign to raise funds for medical education. I hope you will give generous financial backing to this worthwhile program.

Since AMEF will distribute $34,896 to the medical schools of our state this year, we should strive to increase participation by Missouri physicians far beyond the 308 doctors who gave $11,334 to AMEF last October.

James P. Murphy, M.D.
Chairman, Committee for AMEF

HIGHWAY DEATHS

Deaths on the highway during the Memorial Day weekend numbered more than in any previous year. And the holiday season during the summer is the peak time of year for this ever increasing total. Figures are available for 1959. They exceed those of 1958, and the indications are that 1960 will again show an increase.

There were 900 more deaths and more than 50,000 additional injuries on highways in the United States in 1959 than there were in 1958, according to statistics compiled by the Travelers Insurance Company.

Fatalities climbed to 37,600 with more than 2,870,000 injured as result of automobile injuries.

In the report made by the Travelers in its annual highway safety booklet, it was stated that more than 62,000,000 men, women and children have been killed or injured by automobiles since they first appeared on the highways. More have died on the highways than on the nation's battlefields. More have been injured than in all the world's wars combined.

By far the single greatest cause of accidents resulting in death or injury was speed. More than 43.1 per cent of the deaths and 38.8 per cent of the injuries were blamed on speed.

Although making up less than 14 per cent of the driving population, drivers under 25 years of age were involved in nearly 29 per cent of the fatal accidents. There were 13,140 young drivers under 25 involved in fatal accidents during the year, with 2,010 under the age of 18.

Ramblings of the Field Secretary

Representatives of the press and the Cole County Medical Society "broke bread together" and discussed mutual considerations at a meeting at the Jefferson City Country Club on Tuesday evening, May 24. A frank discussion was held concerning publicity on medical matters and how doctors and news reporters may develop good mutual understanding.

Mr. Lew Larkin of the *Kansas City Star* was one of the speakers.

As an observer at this session it was evident that a good friendly relationship exists between the newsmen in Jefferson City and the doctors. This is probably partly due to the fact that the newsmen and physicians in Jefferson City are personally acquainted for the most part. This friendly situation was conducive to a fuller discussion of a few specific matters brought forth at the May 24 meeting.

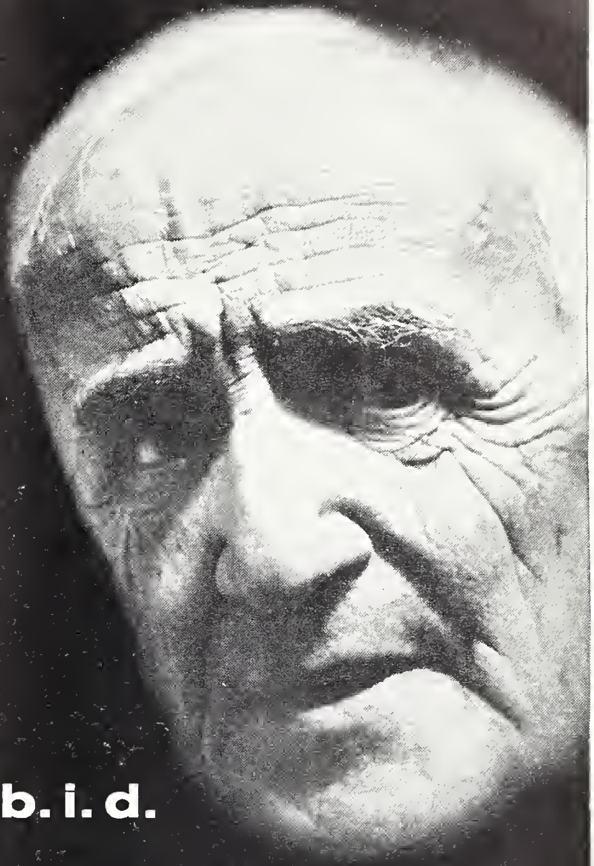
Members of the press who were present included: Lew Larkin, Jefferson City, correspondent for the *Kansas City Star;* Bob Debo, Bureau Manager of the United Press International in Jefferson City; and Joe Majersky, managing editor of the *Jefferson City News Tribune.*

Unusual interest was manifested in the discussion.

Some 26 people including doctors and guests attended this interesting and informative session. The evening festivities began with a social hour followed by dinner and then the formal program. The meeting was arranged by the Cole County Society Public Relations Committee with Dr. Don Shull, Chairman. It wouldn't be surprising to see similar meetings of this type held at regular intervals in the future by this Society.

The annual essay contest for high school students sponsored by the Association of American Physicians and Surgeons has again found a number of Missouri high school students winning honors. We are informed by Dr. T. L. Dwyer, Missouri State Chairman for the Essay Contest, that the following students received awards: Miss Carole Sue Koch, Sullivan High School, 7th prize of $100; Miss Linda McDonnold, Berkeley High School, sophomore, 13th prize of $75. "Meritorious Achievement Certificates" were presented to one student from Berkeley High School, to two students from Sullivan High School, and to three students at Mercy High School in Marshall. The Essay Contest at the Mercy High School was also sponsored by the Saline County Medical Society under the direction of Dr. M. E. Roehrs. The three Mercy High School winners were given cash awards by the Saline County Medical Society in addition to the certificates. All of these students, as a topic for their essays, wrote on either "The Advantages of Private Medical Care" or "The Advantages of the American Free Enterprise System."

Dinner preceded the meeting.



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News—Personal and Professional

At the 10th annual session of the Kansas City Heart Association, **Michael Bernreiter**, M.D., was elected president, and **M. Donald McFarland**, M.D., was chosen president-elect. **Martin J. Mueller**, M.D., was elected a vice president, and **John H. Mayer**, M.D., and **Warren F. Wilhelm**, M.D., were named to the executive committee.

The alumni achievement award of Midland College, Fremont, Neb., was presented to **H. E. Petersen**, M.D., St. Joseph, at an annual reunion banquet held in June.

"What a Doctor Expects From a Medical Assistant" was the subject of a talk presented by **Jo R. Cochran**, M.D., Cape Girardeau, at a meeting of the Cape County Medical Secretaries and Assistants.

Guest speaker at a meeting of the Butler County Senior 4-H Club this spring was **Edward W. Cline**, M.D., Poplar Bluff.

Following presentation by the Jasper County Cancer Society of two films at a meeting of the Carthage Junior Chamber of Commerce, **Frank H. Birsner**, M.D., Carthage, conducted a question and answer period.

"What the Physician Expects of a Registered Nurse" was the topic of a talk presented by **Richard F. Aiken**, M.D., Marshall, at a meeting of the Nurses' Club held in Marshall.

The Exchange Club of Joplin viewed a film on cancer recently and **Norman H. Barnett**, M.D., Joplin, discussed cancer and its characteristics.

To represent the Jackson County Medical Society on a joint committee to study city and county health facilities, four physicians have been appointed, **V. Bryce Ballard**, M.D.; **Hector W. Benoit, Jr.**, M.D.; **Ralph R. Coffey**, M.D., and **Wallace R. Stacey**, M.D.

The Social Health Society of Greater St. Louis has elected **M. Norman Orgel**, M.D., St. Louis, its president.

"Hypnosis" was the subject of a talk given by **Gilbert B. Kelley**, M.D., Savannah, at a meeting of the Buchanan County Women's Democratic Club recently.

Following the showing of two cancer films at a theater in Noel, **W. D. Bradshaw**, M.D., Clinton, discussed cancer. He was introduced by **J. J. Royce**, M.D., Noel, president of the McDonald County unit of the American Cancer Society.

"The Challenge of Cancer" was the subject of a talk presented by **Terry E. Lilly, Jr.**, M.D., Kansas City, at a recent meeting of the Rotary Club of Springfield.

Following the showing of films on cancer in North Kansas City recently, **B. L. Mullins**, M.D., North Kansas City, answered questions from the audience.

The Council for Retarded Children of Poplar Bluff heard **Cyril A. Post**, M.D., Poplar Bluff, discuss "Causes of Mental Retardation."

In a talk before the Round Table Club of Fayette, **W. A. Bloom**, M.D., Fayette, outlined the steps taken toward a hospital for Howard County and announced a gift of $100,000 from a former resident of the county.

The Greater Kansas City Chapter of the American Academy of General Practice named **Richard R. Becker**, M.D., Kansas City "Doctor of the Year" at its annual dinner meeting.

The Pine Lawn Chamber of Commerce recently had **Melvin M. Schwartz**, M.D., as speaker. He discussed various phases of hypnosis.

The Nevada Rotary Club had as speaker at a recent noon meeting **Paul L. Barone**, M.D., Nevada.

Narrator for film strips on cancer recently shown at the court house in California was **Kendall A. Clark**, M.D., Jefferson City.

Speaker at a meeting of the Kansas City Chapter of the American Society of Safety Engineers and industrial physicians and nurses of the Kansas City area was **Rex L. Diveley**, M.D., Kansas City. His subject was "Back Facts."

The Missouri Diabetes Association has elected **Robert L. Jackson,** M.D., Columbia, president, and **John K. Caldwell,** M.D., Kansas City, vice president. **Thomas W. Burns,** M.D., Columbia, was elected secretary-treasurer.

The medical staff of the Menorah Medical Center, Kansas City, has elected **Bela K. Kent,** M.D., Kansas City, president. **Phillip H. Halperin,** M.D., was elected president-elect; **Gustave Eisenmann,** M.D., secretary, and **Milton B. Obar,** M.D., treasurer.

"Fat or Friction" was the title of a talk by **Kenneth C. Price,** M.D., St. Louis, at a meeting of the annual Credit Congress held in St. Louis.

Speaker for the graduation exercises of the practical nurse school at Poplar Bluff was **Fred J. Biggs,** M.D., Poplar Bluff.

A discussion of the problems of the 10-12 year age group at the Parent Education group of the Corder Star School, Kansas City, was led by **Morton Jacobs,** M.D., Kansas City.

The St. Louis Orthopedic Society has elected **Oscar P. Hampton,** M.D., University City, president; **Ralph K. Earp,** M.D., St. Louis, president-elect, and reelected **Richard E. Lord,** M.D., St. Louis, secretary and treasurer.

Among speakers at the 1960 convention of the Missouri Association of Licensed Nursing Homes held in Kansas City, was **W. S. Wilhelm,** M.D., Kansas City.

Principal speaker at a dinner meeting of the Phi Beta Phi medical fraternity of St. Louis University was **Preston C. Hall,** M.D., St. Louis.

"Cardiac Amyloidosis: Electrocardiographic Findings" will be the subject of a paper to be presented by **Michael Bernreiter,** M.D., Kansas City, at a meeting of the International Committee on Electrocardiography meeting in Vienna this month. Dr. Bernreiter is a representative from the United States to the meeting.

Touring Europe, Africa and Asia this summer with three daughters, a granddaughter and his wife, is **John O'Connell,** M.D., St. Louis.

Recently **Vencel W. Hollo,** M.D., St. Louis, was appointed chairman of the Medical and Surgical Section of the Association of American Railroads.

At the dedication of a new medical building at Anthon, Iowa, in late May, **James R. McVay, Sr.,** M.D., Kansas City, was the speaker.

The City Recreation Department of Kansas City honored **Harry M. Gilkey,** M.D., Kansas City, at a meeting at Camp Lake of the Woods in Swope Park on June 12.

At an annual membership meeting of the Joplin League of Women Voters, **L. H. Ferguson, Jr.,** M.D., Joplin, was the speaker.

DEATHS

Walthall, Damon Orian, M.D., Kansas City, a graduate of the University of Michigan, 1916; member of Jackson County Medical Society; aged 70; died March 11.

Hitchcock, Waldo P., M.D., Columbia, a graduate of the University of Alabama, 1949; member of Boone County Medical Society; aged 44; died April 17.

Kibbe, John H., M.D., Monroe City, a graduate of Jefferson Medical College, 1922; a member of Marion-Ralls County Medical Society; aged 65; died April 27.

Koon, Bernard T., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1929; member of St. Louis Medical Society; aged 57; died May 3.

Baron, William, M.D., St. Louis, a graduate of Marion Simms, 1899; member of St. Louis Medical Society; aged 89; died May 11.

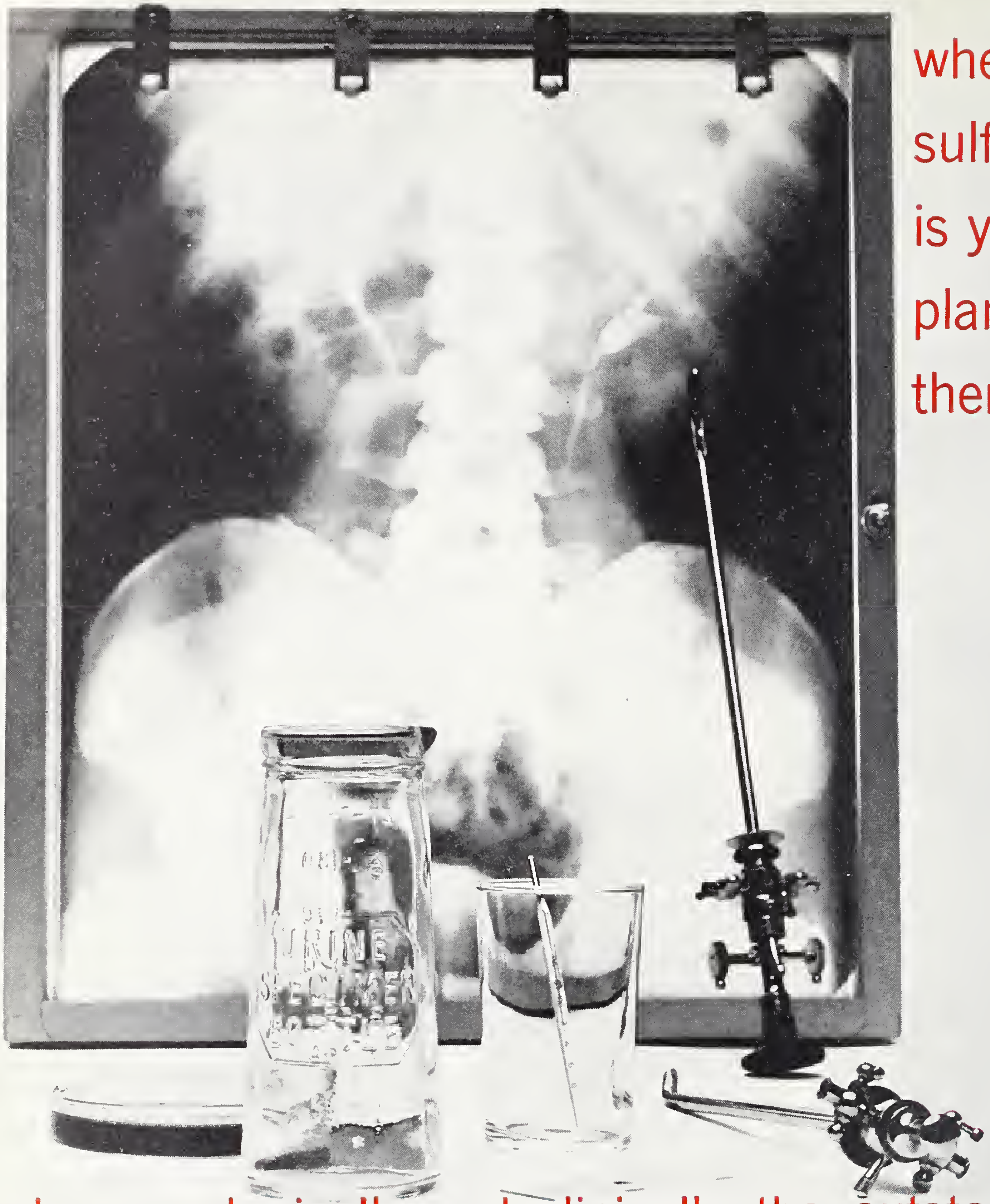
Lemire, Robert W., M.D., Sedalia, a graduate of St. Louis University, 1950; member of Pettis County Medical Society; aged 42; died May 13, 1960.

Heimburger, Leroy F., M.D., Springfield, a graduate of St. Louis University, 1912; member of Greene County Medical Society; aged 71; died May 27.

James, Edward Dean, M.D., Joplin, a graduate of the University of Arkansas Medical School, 1901; member of Jasper County Medical Society; aged 90; died May 28.

Gay, Lee Pettit, M.D., Jefferson City, a graduate of Washington University, 1918; member of St. Louis Medical Society; aged 64; died June 1.

Patton, Leslie E., M.D., Cape Girardeau, a graduate of St. Louis University, 1924; a member of Cape Girardeau Medical Society; aged 64; died June 4.



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1. Boger, W. P.; Strickland, C. S., and Gylfe, J. M.: Antibiotic Med. & Clin. Ther. 3:378, (Nov.) 1956. 2. Boger, W. P.: Antibiotics Annu 1958-1959, New York, Medical Encyclopedia, Inc., 1959, p. 48. 3. Sheth, U. K.; Kulkarni, B. S., and Kamath, P. G.: Antibiotic Med. & Cli Ther. 5:604 (Oct.) 1958. 4. Vinnicombe, J.: Ibid. 5:474 (July) 1958. 5. Anderson, P. C., and Wissinger, H. A.: U. S. Armed Forces M. J. 10:10 (Sept.) 1959. 6. Roepke, R. R.; Maren, T. H., and Mayer, E.: Ann. New York Acad. Sc. 60:457 (Oct.) 1957.

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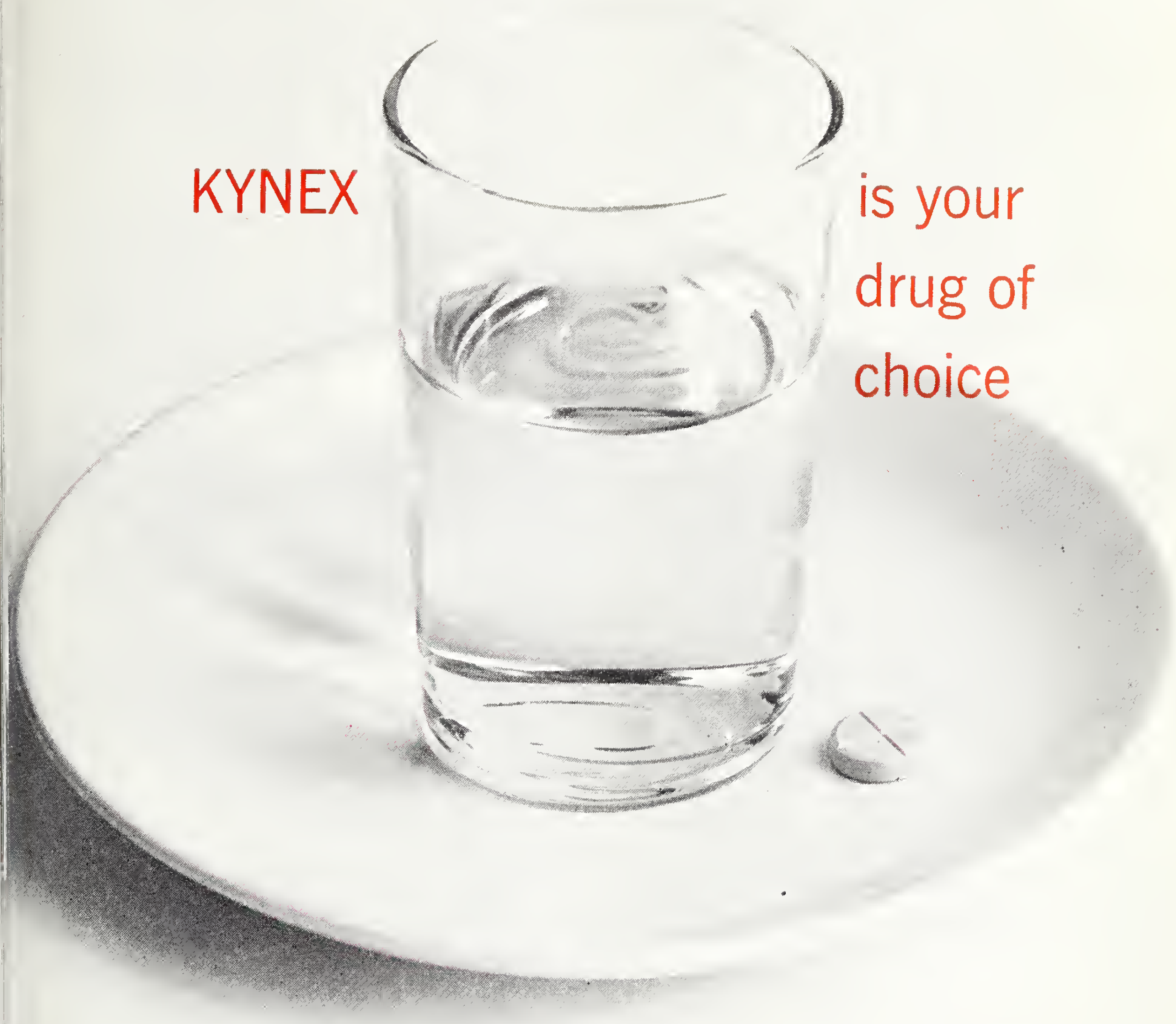

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New Members

Robert C. Ahlvin, M.D., 10121 Dellridge Lane, St. Louis, has become a member of the St. Louis Medical Society. Dr. Ahlvin is a native of Wisconsin, received his preliminary education in Iowa, and his M.D. degree from Washington University School of Medicine in 1954.

George K. Boyd, M.D., Professional Bldg., Kansas City, has become a member of the Jackson County Medical Society. Dr. Boyd is a native of Pennsylvania, received his preliminary education in Pennsylvania, and his M.D. degree from the University of Pittsburgh Medical Center in 1951.

Dick **G. Ellis,** M.D., 5805 Devonshire Ave., St. Louis, has become a member of the St. Louis Medical Society. Dr. Ellis is a native of Oklahoma, received his preliminary education in Texas, and his M.D. degree from Baylor University School of Medicine in 1952. He is serving a residency at St. Louis City Hospital, St. Louis.

Neil I. Gallagher, M.D., 8663 Brookshire Lane, St. Louis, has become a member of St. Louis Medical Society. Dr. Gallagher is a native of Ohio, received his preliminary education in Arizona, and his M.D. degree from St. Louis University School of Medicine in 1954. He interned at St. Louis City Hospital, St. Louis.

Doris C. Gilpin, M.D., 1340 E. Meadowmere, Springfield, has become a member of Greene County Medical Society. Dr. Gilpin is a native of Iowa, received her preliminary education in Missouri, and her M.D. degree from the University of Chicago in 1948.

Albert A. MacPhail, M.D., 3275 January Avenue, St. Louis, has become a member of the St. Louis County Medical Society. Dr. MacPhail is a native of Michigan, received his preliminary education in Michigan, and his M.D. degree from the University of Michigan Medical School in 1954. He is serving a residency at St. Louis City Hospital, St. Louis.

George E. Magaletta, M.D., 3368 Tennyson Avenue, St. Louis, has become a member of the St. Louis Medical Society. Dr. Magaletta is a native of Massachusetts, received his preliminary education in Ohio, and his M.D. degree from St. Louis University School of Medicine in 1956. He interned at St. Louis City Hospital, St. Louis, and is serving a residency at City Hospital as well.

Marvin H. Marx, M.D., 600 S. Kingshighway Blvd., St. Louis, has become a member of the St. Louis Medical Society. Dr. Marx is a native of Missouri, received his preliminary education in New Jersey, and his M.D. degree at Columbia University College of Physicians and Surgeons in 1958. He is serving a residency at Barnes Hospital, St. Louis.

James W. Vaughn, M.D., Neurological Hospital, Kansas City, has become a member of the Jackson County Society. Dr. Vaughn is a native of Kansas, received his preliminary education in Cincinnati, and his M.D. at the University of Cincinnati College of Medicine in 1950.

Robert M. Weiss, M.D., 116 Anabel Avenue, St. Louis, has become a member of the St. Louis Medical Society. Dr. Weiss is a native of New York, received his preliminary education in Arizona, and his M.D. degree from St. Louis University School of Medicine in 1953. He served a residency at St. Louis University Hospitals, St. Louis.

Kirkley R. Williams, M.D., 8020 Monroe Street, St. Louis, has become a member of the St. Louis Medical Society. Dr. Williams is a native of Montana, received his preliminary education in Virginia, and his M.D. degree at Johns Hopkins University School of Medicine in 1955. He has interned and is serving a residency at Barnes Hospital, St. Louis.

William W. Woodward, M.D., 10901 Winner Rd., Independence, has become a member of the Jackson County Medical Society. Dr. Woodward is a native of Kansas, received his preliminary education in Ohio, and his M.D. degree from the University of Kansas Medical School in 1958. He is serving a residency at the University of Kansas Medical Center.

H. B. Zwirn, M.D., 18 Mountclair Ct., Florissant, has become a member of the St. Louis Medical Society. Dr. Zwirn is a native of Germany, received his preliminary education in Switzerland, and his M.D. degree at the Medical School of Basel, Switzerland, in 1954.

THE KEFAUVER INVESTIGATION!

(Continued from page 994)

sand." The Senator could also have told of the company that has spent 70 million dollars since 1950 in research on products, only a few of which have been marketed.

We have much in common, you and I. Together, we stand under a proud banner of tradition, honor, and achievement. We have much to fight for. Let me remind you that if socialized medicine comes to the United States, socialized pharmacy will not be far behind.

Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Buchanan County Medical Society

Forty doctors from St. Joseph and Northwest Missouri attended the May 4 meeting of the Buchanan County Medical Society in the Oak Room of Hotel Robidoux. Dr. Thompson E. Potter, President, presided.

Dr. Richard V. Riddell introduced the speaker, M. E. Richard Turpin, Vice-President of the Standard Life and Accident Insurance Co., Oklahoma City, Okla., who spoke on "Inflation." The speaker said the problem created hardships for everyone who saved, who had money in bonds, who lived on a fixed income of a pension, or who had life insurance. He said the problem, though a growing one, was not an inevitable one despite the growing belief among many persons that it was a part of the economy.

Inflation could be stopped, Mr. Turpin declared, by a united effort of those concerned, and he expressed optimism that such action would be taken.

In a business session following the program, the Society approved a request from the St. Joseph Health Department to again undertake a city-wide spraying for insect control that had been undertaken in former years. The Society was in agreement that the spraying program had been effective in reducing harmful insects and disease, and that the concentration of spray used was not harmful to birds and small animals or to vegetable gardens.

William B. Rost, M.D., *Secretary*

Meeting of June 1

Sixty St. Joseph and Northwest Missouri physicians and dentists attended the eighth annual joint meeting of the Buchanan County Medical Society and the Northwest Missouri District Dental Society on June 1. Presiding jointly at the session were Dr. Thomas E. Potter, President of the Medical Society, and Dr. Robert K. Bridwell, President-elect of the Dental Society.

The meeting was preceded by a dinner in the Oak Room of Hotel Robidoux. Speaker was Mr. Jim McAdoo of St. Joseph who gave an entertaining travelogue on his recent tour of Italy titled, "When in Rome. . . ." The speaker was introduced by Dr. Richard V. Riddell, Chairman of the Medical Society program committee.

William B. Rost, M.D., *Secretary*

Grand River Medical Society

The Grand River Medical Society met at the Strand Hotel in Chillicothe on May 12 for the regular monthly meeting. There were approximately thirty members and guests present.

Dr. Jack Martt of the University of Missouri Medical Center, Columbia, gave an interesting and profitable presentation of the problem of "Cardiac Emergencies."

Following the scientific meeting, a short business meeting was held. There was no action taken on any matters of business.

B. D. Howell, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

J. J. WIMP, COUNCILOR, KIRKSVILLE

Chariton-Macon-Monroe-Randolph County Medical Society

A dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held Thursday night, May 12, at the Woodland Hospital in Moberly.

The scientific program for the evening was presented by Robert Barnes, M.D., of Kansas City, who spoke on "What's New in Psychiatry?" He indicated that although electric shock therapy and surgical procedures are still indicated and done, they are not as popular now as they were a few years ago in the treatment of certain psychiatric conditions. Promising new drugs seem to be replacing these procedures in many cases.

An interesting highlight that came out of the general discussion period was that usually families with a religious background have much less percentage of mental illness.

Dr. Howard Miller, Macon, President of the Society, presided.

Josephine Baker, M.D., *Secretary*

Marion-Ralls-Shelby County Medical Society

"Infant Resuscitation" was the scientific program presented at a dinner meeting of the Marion-Ralls-Shelby County Medical Society, Tuesday night, May 17, at the Mark Twain Hotel in Hannibal. Three members of the faculty of the University of Missouri Medical School presented the discussion. They were: Kenneth K. Keown, M.D., Chairman, Department of Anesthesiology; David Hall, M.D., Department of Obstetrics; and Harold Lischner, M.D., Department of Pediatrics. Numerous members of the Society present for the program indicated that this was one of the best scientific presentations presented before this Society in a long time.

The many comments and questions from the audience was evidence of the interest of the listeners in the panel discussion. The evening festivities were initiated by a social hour, dinner and then the scientific program.

WYETH HAMLIN, M.D., *Secretary*

FOURTH COUNCILOR DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Jefferson County Medical Society

A called meeting of the Jefferson County Medical Society was held in the Jefferson Memorial Hospital, Tuesday, April 26. The meeting was called to order at 8:30 p.m. by the President, Dr. Harry Yoskit. Other members present were: Drs. Bolgar, Fallet, Harold Donnell, Rice, Rutledge and Senn.

The program consisted of a presentation given by five staff members from St. Louis State Hospital. Dr. Donald Bandle, assistant to Dr. Kohler, was the moderator. Others in the group were Dr. Joseph Callahan, resident physician; Dr. Abel Ossorio, psychologist; Miss Jane Bierderman, social worker; and Mrs. Joan Higgins, R.N. Each described briefly the functioning of their department in the institution; then a case was presented and each one of the panel described their work and experiences with this interesting, complicated case which fortunately turned out fairly well. One point that stood out in the program was the need for and the value of hard work and team work on the part of many individuals of different specialized training.

A most animated discussion period followed the program and the evening wound up with the usual refreshments.

JOHN F. RUTLEDGE, M.D., *Acting Secretary*

Lincoln-St. Charles County Medical Society

A dinner meeting of the Lincoln-St. Charles County Medical Society was held at the Southern Air, Wentzville, on Tuesday night, May 31, with sixteen doctors in attendance. A social hour and dinner preceded the formal program.

The scientific paper of the evening was given by Thomas W. Burns, M.D., Associate Professor of Medicine at the University of Missouri Medical School. Dr. Burns spoke on "The Practical Application of the Newer Synthetic Adrenal Cortical Steroids." This was an interesting and profitable discussion on a matter of current interest to those present.

PAUL ROTHER, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

BYRON M. STUART, BOONVILLE, COUNCILOR

The Fifth Annual Spring Clinical Conference at the University of Missouri Medical Center held on Wednesday and Thursday, May 11 and 12, was sponsored by the Medical School, Missouri Heart Association, the Missouri State Diabetes Association and the Missouri Academy of General Practice.

Attendance was unusually good.

This year's attendance exceeded that of any of the previous conferences. There were 204 physi-

An informal discussion was held.

for the acute asthmatic attack

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RAPID ORAL CONTROL WITHOUT G.I. IRRITATION

ELIXIR SYNOPHYLATE relieves wheezing and dyspnea in 5 to 10 minutes after a single dose. Significant blood levels are achieved in 15 minutes, persisting for at least 4 hours.

Because of its built-in buffer, theophylline sodium glycinate [SYNOPHYLATE] is "tolerated in larger doses than are possible with other theophylline preparations,"[1] including aminophylline.[1-3]

the most potent theophylline elixir available . . . may avoid need for I.V. injection

1. A. M. A. Council on Drugs: New and Nonofficial Drugs 1959, Philadelphia, Lippincott, 1959, p. 389. 2. United States Dispensatory (Osol-Farrar), ed. 25, Philadelphia, Lippincott, 1955, p. 1412. 3. Grollman, A.: Pharmacology and Therapeutics, ed. 3, Philadelphia, Lea & Febiger, 1958, p. 208.

Each tablespoonful (15 ml.) contains 0.33 Gm. (5 gr.) equivalent to 0.16 Gm. (2½ gr.) Theophylline U.S.P. Supplied: Bottles of 1 pint and 1 gallon.

Literature on request.

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cians registered from outside of Columbia. They came from all areas of the state and from their remarks concerning the program, they seem to feel that the program this year was an unusually strong one.

There was a good number of physicians present who are members of the Missouri Academy of General Practice. The two day program was acceptable for 12 hours of Category I Credit for Academy members.

Leonard M. Schuman, M.D., Professor of Epidemiology, University of Minnesota School of Public Health, Minneapolis, was sponsored as one of the guest speakers on the program by the Missouri Academy. The two day sessions were of such content as to interest both general practitioners and specialists. Diabetes and polio were both considered extensively in panel discussions. Heart disease came in for its share on the program and the final panel held most of the audience to the very last. It covered the subject, "Recurrent Carcinoma of the Breast—Diagnosis and Treatment."

Alexander Marble, M.D., Clinical Professor of Medicine, Harvard Medical School, Joslin Clinic, Boston, Mass., was sponsored on the program by the Missouri Diabetes Society. Carlton B. Chapman, M.D., Professor of Medicine, University of Texas Southwestern Medical School, Dallas, Texas, was a guest speaker under the sponsorship of the Missouri Heart Association.

Members of the MAGP pose with Mr. Schumann.

Other out-of-state speakers on the program under the direct sponsorship of the University of Missouri Medical School, were Willis E. Brown, M.D., Professor of Obstetrics and Gynecology, University of Arkansas School of Medicine, Little Rock, Ark., and Frederick Collar, M.D., Professor of Surgery, Emeritus, University of Michigan School of Medicine, Ann Arbor.

BYRON STUART, M.D., *Councilor*

SIXTH COUNCILOR DISTRICT

O. B. BARGER, COUNCILOR, HARRISONVILLE

Henry, Johnson, Pettis, Saline County Medical Societies

By the invitation of the 805th medical group, U. S. Air Force, Whiteman Air Force Base, a joint dinner meeting of the Henry, Johnson, Pettis, Saline and adjacent county medical societies and the doctors' wives was held at the Air Force Base on Wednesday night, May 18. The evening program began at 5:00 p.m., with those who desired being taken to Base Operations to witness a SAC Alert. It was a real thrill to see a group of big jet bombers made ready to take off on a given signal. At 6:30 p.m. a most enjoyable social hour was held in the Officers' Club. Dinner was served at the club at 7:30 p.m.

Dr. Brooke was one of the speakers.

Following dinner the ladies retired to a separate meeting room where they witnessed a style show. The scientific program presented for the doctors was a discussion on "Our Current Knowledge in Virology" given by Clement E. Brooke,

There was a good audience.

The doctors' wives enjoyed a style show.

M.D., Associate Professor of Pediatrics and Donald P. Durand, Ph.D., Assistant Professor of Microbiology, of the University of Missouri Medical School. This was well received and was both an interesting and informative discussion.

In addition to the festivities just related, a number of the doctors came early enough in the afternoon to play a round of golf on the base golf course.

Some 125 people attended this meeting. The medical societies in the area are grateful to Col. S. A. Cheeseman, Commander of the 805th Medical Group at the Air Force Base, for his invitation to meet at the base and for the many courtesies extended by him and members of his staff.

O. B. BARGER, M.D., *Councilor*

West Central Missouri Medical Society

The regular monthly meeting of the West Central Missouri Medical Society was held at the Wagon Wheel Cafe, Harrisonville, on the evening of May 12. The usual social hour was held with some coming late for the festivities.

The steaks were enjoyed and thanks go to the management for such a delightful meal.

Following the meal we entered into the scientific program for the evening and listened to Dr. John Growdon, surgeon from Kansas City, who with Mrs. Growdon, traveled down to present this fine program on a timely subject, "Intestinal Obstruction." Those who have had the pleasure in the past of listening to Dr. Growdon know that we were given a very fine résumé of the subject. We enjoyed hearing him present his subject in the fine manner which he always does and the x-rays which he had to follow up his presentation added much to the program. Visually seeing something always adds much to the presentation made by the speaker.

We are glad to have with us our guest speaker, Dr. John Growdon and Mrs. Growdon, and Dr. Hollingsworth, Dr. Smith and Dr. King from our adjoining area of Clinton. We are always glad to have members of the neighboring county societies with us and hope they will return. Members present were: Drs. Roy Pearse, L. P. McCann, James Pascoe, Nevada; Dr. and Mrs. Tracy, Belton; Dr. and Mrs. Hartwell, Drexell; Dr. and Mrs. Barger, Dr. and Mrs. Jones, Dr. and Mrs. Moody, Harrisonville, and Dr. C. W. Luter, Butler.

The meeting adjourned to meet in Butler, Inn Hotel, June 9, for the final meeting until fall. The program committee got together with Ray McIntyre in Columbia at the Spring Conference of the University Medical School and has mapped out a fine program for the remainder of the year and for part of next year. We need to start some desire among the members for better attendance at our meetings, for in recent months it has been at a low mark. This Society after all is for the entire group and not just an organization for a few.

CARTER W. LUTER, M.D., *Secretary*

Meeting of June 9

The regular monthly meeting of the West Central Missouri Medical Society was held the evening of June 9, at Butler in the dining area of the Inn Coffee Shop.

The social hour with the usual festivities began at 6:30 p.m. and convened until the greater portion of those who had indicated they would attend had appeared.

This was a fine meeting. The scientific program was furnished by Dr. E. H. Stratemeier, Jr., Kansas City, who is associated with Dr. E. R. DeWeese and his group in that city. Dr. Stratemeier presented a timely and illustrated subject in his field of x-ray on the newer technics in the intravenous field of x-ray in the vascular system, and had some nice films. We enjoyed having him with us and feel that we have gained considerably from his presentation.

Following the scientific meeting a discussion was had relative to some of the procedures pertaining to the new rest home program. Most have been well informed on these procedures and are following along on the program.

Dr. Barger, Councilor, presented no further business for the evening except to remind us of the elections coming up and some of the points to consider relative to future bills. The meeting adjourned until September in Nevada.

Those present at the meeting were: Dr. and Mrs. O. B. Barger, Harrisonville, and guests, Mr. and Mrs. Wm. Cason, Clinton; Dr. and Mrs. B. O. Hartwell, Drexell; Jack Moody, Harrisonville; Dr. Roy Pearse and daughter, Nevada; Dr. James Pascoe, President; Dr. and Mrs. Robert Magee, Eldorado Springs; Dr. Claude Allen, Rich Hill; Drs. D. C. Ronald and C. W. Luter and A. L. Hansen, Butler. Dr. Masor, recently associated with Dr. C. A. Lusk, Jr., Butler, was present for the scientific program before leaving the next morning to return to eastern Ohio to bring his family to Butler.

We are closing the monthly meetings as of this month and will reconvene monthly meetings this September 1960 in Nevada with a program with the coaches and athletic doctors on injuries of an athletic nature.

Carter W. Luter, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, COUNCILOR, SPRINGFIELD

Greene County Medical Society

The regular meeting of the Greene County Medical Society was held Friday, May 27, at the Holiday Inn with 57 members and four guests present.

Dr. Walter W. Tillman, Jr., the president, presided.

Dr. Tillman welcomed Drs. Alvon C. Winegar and Bruce B. Bellomy to the meeting. Dr. Winegar has recently opened his office in the practice of obstetrics and gynecology, and Dr. Bellomy is newly associated with Drs. Coller and Gorelick.

The president brought to the attention of the members the death of Dr. L. F. Heimburger, a past president of this Society and past editor of the *Bulletin,* and called for a moment of silence in memory to Dr. Heimburger.

Dr. Tillman announced that Mr. John I. Rollins of St. Louis, president of the Missouri State Labor Council, will address the Society on June 24, discussing "What Labor Feels Is Necessary for Medical Care of Its Members and of the Aged."

The president reported that members of this Society would receive announcements the first of June concerning the June 26 Lederle Symposium on Medicine and Surgery which will be jointly sponsored by the Southwest Chapter of the Missouri Academy of General Practice, the Greene County Medical Society and Lederle Laboratories at the Holiday Inn. He discussed participants in the program and urged all members of the Society to attend this excellent Symposium.

Dr. John Ferguson presented a four-way test plaque to the Greene County Medical Society on behalf of the Competitor Relations Committee of the Springfield Rotary Club.

Dr. Stanley S. Peterson, Chairman of the Missouri State Medical Association Committee on Aging, presented Mr. Emil E. Brill, senior vice-president of the General American Life Insurance Company of St. Louis and chairman of the Missouri Committee for the 1961 White House Conference on Aging, who discussed "Why Is Federal Legislation for Medical Care of the Aging a 'Must' Now?" Following Mr. Brill's presentation, there was a 30 minute question and answer period. Dr. Tillman expressed appreciation to Mr. Brill for his excellent presentation.

The minutes of the April meeting were approved as published in the *Bulletin.*

The application of Dr. Doris Gilpin for active membership in the Society was presented for the second reading and vote. Upon motion by Dr. Schwartz, seconded by Dr. Ferguson, Dr. Gilpin was unanimously approved for membership.

The president presented for the second reading and vote the following amendment to the By-Laws as presented at the April meeting and published in the May *Bulletin.*

"That Chapter 10., Dues, the second paragraph of the By-Laws be amended by deleting the figures $55.00 and inserting in lieu of, $75.00, so this paragraph shall read, 'Active: Seventy-five dollars ($75.00) plus the dues and assessments of the Missouri State Medical Association.' This amendment is to take place immediately upon passage and retroactive to January 1, 1960, and all members of the Society billed for this additional $20.00 for 1960." The floor was open for discussion; there being none, the vote was called and the amendment to the By-Laws carried without dissent.

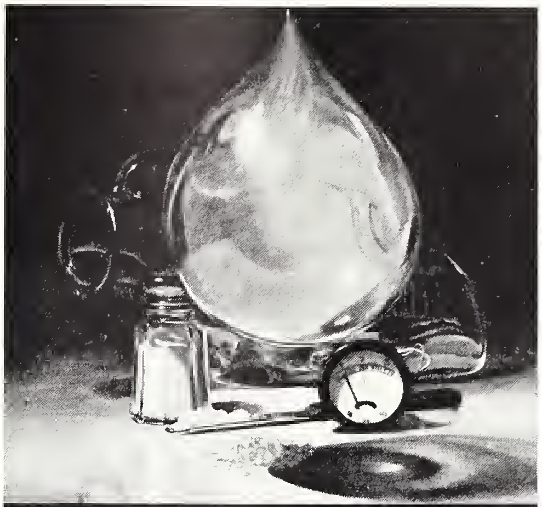
There being no further business, the meeting was declared adjourned.

F. T. H'Doubler, Jr., M.D., *Secretary*

Ozarks Medical Society

The Ozarks Medical Society met May 10 at 7:00 p.m. at the Shadow Rock Park Hotel in Forsyth, with twenty-five members and guests present for a dinner meeting.

The scientific program was presented by Drs. Wendell Dietz, Robert Duncan and Richard Webb, on various phases of gallbladder disease, with illustrated color slides and charts. This was an excellent program and engendered lively discussion following.



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"...a safe and extraordinarily effective diuretic..."[1]

Naturetin — reliable therapy in edema and hypertension — maintains a favorable urinary sodium-potassium excretion ratio . . . retains a balanced electrolytic pattern:

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Although Naturetin causes the least serum potassium depletion as compared with other diuretics, supplementary potassium chloride in Naturetin c̄ K provides added protection when treating hypokalemia-prone patients; in conditions where likelihood of electrolyte imbalance is increased or during extended periods of therapy.

Numerous clinical studies confirm the effectiveness[1-15] of Naturetin as a diuretic and antihypertensive — usually in dosages of 5 mg. per day.

■ the most potent diuretic, mg. for mg.—more than 100 times as potent as chlorothiazide ■ prolonged action — in excess of 18 hours ■ maintains its efficacy as a diuretic and antihypertensive even after prolonged or increased dosage use ■ convenient once-a-day dosage — more economical for patients ■ low toxicity — few side effects—low sodium diets not necessary ■ not contraindicated except in complete renal shutdown ■ *in hypertension*—significant lowering of the blood pressure. Naturetin may be used alone or with other antihypertensive drugs in lowered doses.

Supplied: Naturetin Tablets, 5 mg. (scored) and 2.5 mg. Naturetin c̄ K (5 c̄ 500) Tablets (capsule-shaped) containing 5 mg. benzydroflumethiazide and 500 mg. potassium chloride. Naturetin c̄ K (2.5 c̄ 500) Tablets (capsule-shaped) containing 2.5 mg. benzydroflumethiazide and 500 mg. potassium chloride.

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'NATURETIN' IS A SQUIBB TRADEMARK.

Squibb Quality—the Priceless Ingredient

Two hours formal Class I Academy Credit was allowed for this meeting which was arranged by Mr. McIntyre and Dr. Walter Tillman. Dr. Tillman, Councilor of the 8th district, was also present.

The meeting was adjourned to meet in Neosho on September 13.

A. J. Graves, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

E. A. STRICKER, ST. JAMES, COUNCILOR

Mid-Missouri County Medical Society

On Thursday night, May 26, a joint dinner meeting of the Mid-Missouri County Medical Society and the Ozark Dental Society, with the wives of the members of the respective societies, was held in Rolla in the Pine Room of the Greyhound Bus Station. A short social get-together preceded dinner and the formal program.

A panel on "Dental-Medical Hypnosis" composed the main portion of the program.

Panel members were: B. J. Bass, M.D., Salem; E. E. Feind, Rolla; and John W. Hill, D.D.S., Rolla. The panel discussion included conditioned patients of various types selected by members of the panel.

This was a most interesting presentation and apparently fully enjoyed by all privileged to be present.

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler-Ripley-Wayne Medical Society

The Butler-Ripley-Wayne County Medical Society met at the Hickory House at 6:30 p.m., May 12, for the regular monthly meeting.

The program was a Clinical Pathological Conference. The case was presented by Dr. Englehardt with discussions from several members of the Society. The pathologic part of the program was presented by Dr. Cooper and Dr. Campos of St. Louis, who were guests for the meeting, with an excellent discussion being carried out on fibrinolysin and particularly obstetrics.

The program was well attended and was one of the finest programs that we have had in our Society meetings. The meeting was adjourned at 10:00 p.m.

E. T. Hansbrough, M.D., *Secretary*

Dunklin County Medical Society

Twenty-five physicians from southeast Missouri attended a dinner meeting of the Dunklin County Medical Society at the Cotton Boll Hotel in Kennett on Wednesday evening, May 4.

The audience was attentive.

The evening festivities began with a social hour featuring boot heel tea followed by a bountiful smorgasbord dinner and then the program.

The scientific presentation was sponsored by the Missouri Academy of General Practice in cooperation with the Division of Cardiology, St. Louis University Medical School, and presented a discussion on "The Treatment of Hypertension" by Dr. James G. Janney, Jr., and Dr. George Duane of St. Louis. An interesting and practical discussion of this important subject was given by Drs. Janney and Duane with questions and informal comments from members of the audience adding to the discussion.

Drs. Janney and Duane presented the program.

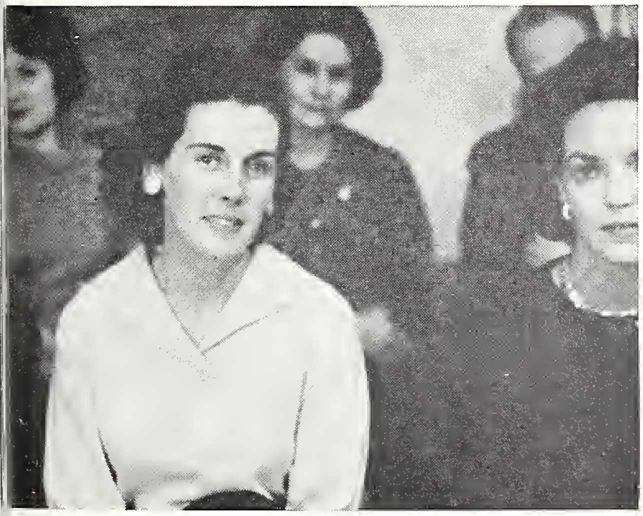
E. L. Spence, M.D., *Secretary*

The physician listens to a tense, nervous patient discuss her emotional problems. To help her, he prescribes Meprospan (400 mg.), the only continuous-release form of meprobamate.

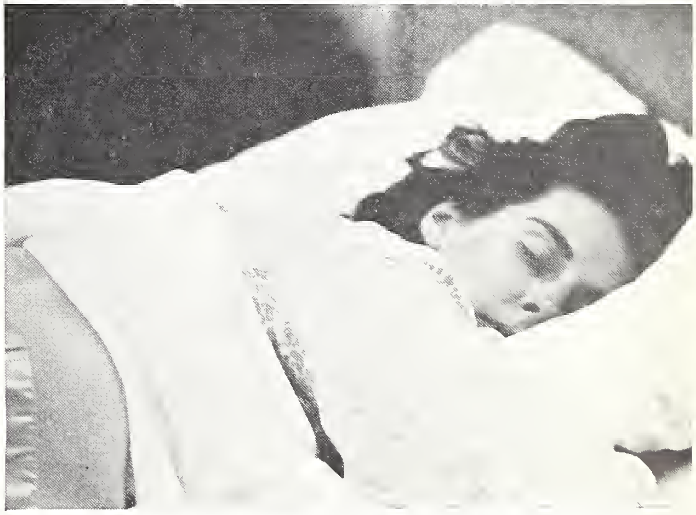
The patient takes one Meprospan-400 capsule at breakfast. She has been suffering from recurring states of anxiety which have no organic etiology.

She stays calm while on Meprospan, even under the pressure of busy, crowded supermarket shopping. And she is not likely to experience any autonomic side reactions, sleepiness or other discomfort.

She takes another capsule of Meprospan-400 with her evening meal. She has enjoyed sustained tranquilization all day—and has had no between-dose letdowns. Now she can enjoy sustained tranquilization all through the night.



Relaxed, alert, attentive . . . she is able to listen carefully to P.T.A. proposals. For Meprospan does not affect either her mental or her physical efficiency.



Peacefully asleep . . . she rests, undisturbed by nervousness or tension. (Literature on Meprospan is available from Wallace Laboratories, Cranbury, N. J.)

The Council

The Council met at Hotel Chase, St. Louis, May 21, 22, 1960, with Donald M. Dowell, M.D., Chillicothe, Chairman, presiding. Those present were Drs. Dowell; J. J. Wimp, Kirksville; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; E. A. Stricker, St. James; Ben M. Bull, Ironton; R. O. Muether, St. Louis; J. H. Summers, Lebanon; John I. Matthews, Jefferson City; Vernon E. Wilson, Columbia; Messrs. John W. Noble, Kennett; T. R. O'Brien, Ray McIntyre, Lemoine Skinner, Jordan Singleton, Gene Lunn and Miss Helen Penn, St. Louis; John R. Buckner, Springfield; Hollister Smith, and E. J. Mothershead, St. Louis; W. H. Bartleson, Kansas City. For portions of the meeting in attendance were Dr. Paul Max, St. Louis; Mr. Norris Allen, St. Louis; Dr. H. M. Hardwicke, Jefferson City; Dr. Addison M. Duval, Jefferson City; Dr. James Haddock, St. Louis; Dr. Earl Loyd, Jefferson City; Dr. Robert Tanner, Jefferson City; Messrs. Hubert Harris and J. O. Talley, Jefferson City.

MINUTES

Minutes of the Council meetings of March 13 and 16 were read and approved.

9TH DISTRICT COUNCILOR

On recommendation of the delegates of the 9th Councilor District, Dr. E. A. Stricker, St. James, was appointed to serve as Councilor from that district until the next Annual Session, on motion of Dr. Whitener.

NATIONAL SOCIETY FOR MEDICAL RESEARCH

A request from the National Society for Medical Research for the customary gift of $50.00 toward its work was presented. It was stated that a bill on animal experimentation was under consideration for introduction into Congress. While the Society opposed the bill, it was felt that it might bring clarification on antivisection matters. It was reported that Sen. Symington originally was going to sponsor the bill but had withdrawn his sponsorship. On motion of Dr. Tillman, it was voted to make the contribution.

STUDENT A.M.A.

It was announced that a request had been made from the University of Missouri Student AMA that assistance be given again this year in sending a delegate to their national meeting. It was stated that $75.00 was offered and on motion of Dr. Tillman, this was approved.

MD

It was announced that on May 27 "MD," of the March of Medicine series, would be presented at 9:30 p.m. on the NBC network.

ST. LOUIS MEDICAL SOCIETY MEMBERSHIP

Mr. O'Brien outlined correspondence relating to a membership problem in which a member of the St. Louis Medical Society desired to be a member of that Society but not the State Association nor the AMA. Mr. O'Brien reviewed the action of the House of Delegates of MSMA on April 21, 1903. Prior to that time, the Judicial Council of the Association, whose chairman was Frank J. Lutz, M.D., a member of the St. Louis Medical Society, had submitted a report and a revised Constitution and By-Laws to all of the county societies for their approval. This report and By-Laws stated that all members of component societies were members of the Association. A list of societies, including St. Louis Medical Society, had approved the report and the new By-Laws. It was pointed out that the present By-Laws of the Association and those of St. Louis Medical Society included such provision.

Dr. Furlow introduced Dr. Max, President of the St. Louis Medical Society, and Mr. Norris Allen, attorney for the Society. Mr. Allen said that he had checked with the Secretary of State and found that both bodies are legally incorporated and that it seemed that such incorporation allowed difference in membership.

Dr. Max said that a bequest that had been made to St. Louis Medical Society was about to be federally taxed and a division of membership in the two organizations might help their tax situation.

After further discussion, on motion of Dr. Furlow, it was voted to defer further discussion until a later meeting after further study had been made.

TREASURER'S REPORT

The Treasurer's report was presented, showing that the activities of the Association were within the budget.

PUBLIC SERVICE PROGRAM

Dr. Muether gave the following report for the special committee of the Council of a proposed "Public Service Program."

Distribution of Mimeographed Program Plans, Including Copies of Staff Section

This was the original draft of the elements of the program as suggested by the committee as a basis for investigation with various individual physicians throughout the state in order to test the reaction of the membership.

As a result of these discussions, some modification of the plan seems desirable.

The program as originally suggested has four main elements:

(a) Organization on a local level—and then publicizing—a guarantee that physicians' services are available to all, without regard to the ability to pay.

(b) Organization of a formal emergency call system in each community, with suitable publicity of the service.

(c) Local and state directories of health resources for the information principally of physicians seeking special services for indigent patients.

(d) Gathering of information and publicizing the medical profession's support of medical education and adequate distribution of physicians.

The last two elements seem to present no basic problems in accomplishment.

Establishment of formal emergency call systems, however, apparently will present difficult problems in many parts of the state—and the guarantee of service element presents even greater difficulties.

In attempting to determine the possible reaction of individual physicians and local societies, the elements of the suggested program were discussed with some 30 physicians, representing 12 different local medical societies and 18 localities. Communities involved ranged from towns of less than 1,000 population to outstate cities of 50,000 and more.

In brief, the reaction to the guarantee of service program in general was one of resistance. Even those who felt that publicizing such a guarantee was a good idea were not really enthusiastic about it.

Basically, although feeling that medical care was available to anyone who needed it, most men felt that publicizing the guarantee would create a number of problems for local physicians, and that such a program would carry a grave risk if, through misunderstanding or lack of full cooperation, instances arose in which it did not work perfectly.

In connection with emergency call systems, local conditions of number and distribution of physicians, geography, location of medical centers, etc., would probably preclude the establishment of a formal system in a number of societies. In others, usually larger, specialization creates a problem, since men in certain specialties may not be willing to take calls on cases that might be foreign to their usual range of care. In perhaps the majority of communities, however, a formal emergency call system could be set up without too much difficulty, since informal arrangements already exist. All that would be needed in such cases would be formalizaton of the system by the local society and publicity.

The apparent reluctance of many of the physicians with whom the program was discussed to endorse publicizing of a guarantee of service, and the local conditions preventing establishment of emergency call systems in some communities does not necessarily mean that these two elements need to be dropped from the public service program. The suggestion can still be made to all local medical societies that they develop and implement such arrangements if they feel they would be practical, workable and of public relations value. They can be urged, in particular, to investigate the possibilities of establishing formal emergency call systems.

The reactions of many of the physicians interviewed do make it appear, however, that guarantee of service and emergency call systems should not be depended upon as the cornerstones of the public service program. It seems apparent now that we cannot realistically expect to see these two elements operate state-wide.

At the same time, the discussions with physicians from different areas of the state brought out a number of suggestions which might be effective in the final form of the public service program to be proposed to the local societies. Several counties, by public action, have taken definite steps to solve the problem of medical care for the indigent. In Pettis County, a full scale program has been developed through the efforts of the medical society involving not only the practicing physicians but the hospital, retail druggists, the welfare department, a county physician, all backed by the county court. In DeKalb County, a county nursing home has been built to take care of a great deal of the problem. Madison County is building a county hospital with nursing facilities. A number of counties have county physicians on one basis or another.

The objectives of the public service program remain recognized and valuable. The program should be realistic and practical, however, and the committee and the Council should consider a number of possible ways of going forward in the light of the House of Delegates resolution. Since there seems to be enough resistance to the guarantee of service program and even emergency call systems to raise the question of changing the emphasis, at least, on these elements, perhaps the solutions that various counties have worked out should be studied further. Case histories and reports could be prepared and presented to all local societies and meetings arranged for interchange of information and ideas among societies in similar circumstances. All societies could then be urged to undertake an active program in their communities, adapting the parts of programs that have been effective for others to their own needs. On a state level, assistance would be provided in the planning, organizing and carrying through of the local programs and in publicizing the efforts of the local physicians to provide for the needs of the community.

Costs of advertising were discussed and a list of advertising rates in papers in the state were given to appropriate Councilors. It was pointed out that the cost of insertion of a one inch ad in every paper in the state would cost $287 per insertion; that a two column by 5 inch ad would cost $2,700. It was estimated that telephone directory costs would be about $12,000 a year. It was pointed out that in many cases telephone companies would be glad to cooperate with societies on emergency calls.

Following the request for county societies to appoint a committee, nine out of 52 have done so, so far.

Mr. Singleton reported on conferences with physicians from various parts of the state and said that a great deal of concern was expressed that possibly they are not giving sufficient care but that they also feared that a guarantee for giving care would be abused and would make it impossible to give as good care as at present. He said that the specialist was fearful of emergency service because it is often completely out of his line. The way such service is handled was reported from several districts by Councilors but it was stressed that the program would be a triad, the state, county and individual physician, the physician being the most important link. It was pointed out that "emergency" has a different meaning for the lay and for physicians. It was pointed out that during the war years, the lay public cooperated well with physicians and that probably more lay education was needed today.

It was suggested that since the emergency guarantee originated in California, that information might be obtained on that. No action was taken but the consensus was that advertising was impractical and unnecessary, but that further study and work should be done on the program, letting the activities of successful societies be known by other societies.

CONFERENCE ON AGING

The various meetings that have been held over the state were reviewed briefly as the Committee on Aging had reported in full at the last meeting of the Council. It was said that one or more physicians were at all community conferences and that in several the Forand Bill was not mentioned. Dr. Hardwicke, state chairman of

Another significant statement concerning the role of fats

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Dietary Linoleic Acid and Linoleate—*Effects in Diabetic and Nondiabetic Subjects with and without Vascular Disease*

A paper by Laurance W. Kinsell, M.D., et al., excerpted from Diabetes—The Journal of the American Diabetes Association, May-June 1959

“*Linoleic acid as the major 'hypocholesterolemic agent' in vegetable fats.* The question has been raised as to the mechanism of lowering of the plasma lipids by a variety of vegetable fats. Among the entities present in or absent from vegetable fat which have been considered are: (a) the absence of cholesterol; (b) the presence of certain vegetable sterols; (c) the presence of certain vegetable phospholipids; (d) the nature of one or more of the fatty acids present; (e) the presence of trace materials.

n the diet

The absence of cholesterol has been excluded as a major factor.[5a] Phospholipids, if they contain a sufficient quantity of unsaturated fatty acids may produce a striking reduction. In our experience thus far saturated phospholipids fail to produce such an effect.[7]

Beveridge and his associates believe that vegetable sterols, particularly beta-sitosterol, are responsible to a significant degree for the cholesterol-lowering effect.[8] In our experience the vegetable sterols have a relatively weak and unpredictable effect of this sort.

Since the fatty acids of animal fats are predominantly saturated, and the fatty acids of most vegetable fats are predominantly polyunsaturated, with linoleic acid as the major component of the vegetable fats which lower cholesterol and other lipids, the question arises whether linoleic acid per se is capable of lowering plasma lipids. As reported previously[7] this is indeed the case. In a recent study in a young male with peripheral atherosclerosis in association with elevation of plasma cholesterol and of total lipids, ethyl linoleate produced a greater fall in the plasma lipid levels than had moderate amounts of natural sources of unsaturated fat. Linoleic acid, therefore, appears to be the most important single lipid-lowering component of vegetable fat.

* * *

Significantly higher levels of cholesterol were observed during oleate administration than during administration of equal amounts of linoleate. The relatively low cholesterol values during the second oleate period may have been related to linoleate stored in fat depots. The fatty acid composition of the cholesterol esters reflected the fat which was fed, i.e., the mono-enoic[†] acid content averaged more than 40 per cent during oleate feeding and less than 20 per cent during linoleate ingestion. Essentially, a mirror image of this resulted during linoleate feeding, at which time di-enoic acid predominated.

* * *

The data presented in this paper appear to establish that linoleic acid administered either as purified ethyl ester or as naturally occurring fat, in sufficient quantity, in properly constructed diets, will reduce plasma lipids to normal levels. The amount of linoleic acid required appears to bear a direct relationship to the amount of saturated fat included in the diet. Linoleic acid requirement may also bear a significant relationship to the amount of atherosclerosis present.

The transition from evaluation of the effect of dietary entities upon plasma lipids, to the evaluation of the effect of such materials upon vascular disease is difficult. However, such evaluation is not impossible. The requisites are adequate measuring sticks and well-controlled studies of sufficient duration. The duration of observation of effects of unsaturated fat in diabetic and nondiabetic patients with vascular disease is in no instance more than five years, and in the majority of instances, less than three. Our present impression is that improvement has occurred in some patients with atherosclerosis and with diabetic retinal and renal disease which was more than we would have anticipated in terms of the natural course of the disease. However, since it is well known that major fluctuations in these diseases can occur in individuals receiving no treatment, we believe it is appropriate at this time to say that no untoward effects appear to result when one prescribes diets containing large amounts of unsaturated fat for patients with such diseases, and it is not impossible that beneficial effects may be associated with such diets.”

* * *

[5a] Kinsell, L.W., Partridge, J. W., Boling, L., Margen, S., and Michaels, G.D.: Dietary modification of serum cholesterol and phospholipid levels. J. Clin. Endocrinol and Met. 12:909, 1952.

[7] Kinsell, L. W., Friskey, R., Splitter, S., Michaels, G. D.: Essential fatty acids, lipid metabolism, and atherosclerosis. Lancet 1:334, 1958.

[8] Beveridge, J.M., Connell, W.F., Firstbrook, J. B., Mayer, G.A., and Wolfe, M.J.: Effects of certain vegetable and animal fats on plasma lipids of humans. J. Nutrition 56:311, 1955.

[†] Mono-enoic (mono-unsaturated) acid is presumably synonymous under these conditions with oleic acid and di-enoic (di-unsaturated) acid with linoleic acid

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Oleic acid glycerides (mono-unsaturated)	16-20%	Total tocopherols	0.09-0.12%
Total unsaturated	70-75%	Never hydrogenated—completely salt free	

the task force on medical care, said that there might be a minority report from some within his group. He said that the report had been written but had not been unanimously approved as yet. He called attention to the state conference in Jefferson City on July 8 and 9, and asked that physicians be at that meeting.

PAYMENT FOR V.D. TREATMENT

Dr. Hardwicke announced that there had been some protest over the nonpayment for treatment of venereal disease and in some cases there was difficulty in obtaining information from the physician and that the number of reported contacts declined by 39 per cent since the change. He read a letter from the Pemiscot County Society asking that payment for treatment be reinstituted. On motion, this matter was referred to the Committee on Control of Venereal Disease.

The retardation of children from diet deficiency was discussed, following up discussion at the previous Council meeting. On motion of Dr. Stuart, this was referred to the Committee on Infant and Child Care.

MATERNAL WELFARE

Dr. Hardwicke said that the Chairman of the Committee on Maternal Welfare would like for him to call a meeting with the chairman of a similar osteopathic committee to determine if better reporting might be accomplished. On motion of Dr. Tillman it was agreed that Dr. Hardwicke should call such a meeting.

DRUGS

The over prescription of certain drugs was discussed and it was felt that this was a problem for the Board of Licensure.

MENTAL HEALTH

Dr. Duval gave a progress report for the Division of Mental Diseases. He asked for the support of the Association in his work in trying to bring Missouri from its present standing in the field of mental health to a higher position. He said that about half of the necessary staff for the central office had been obtained. He discussed the overcrowding of hospitals; the attempts to make treatment centers instead of custodial institutions; the difficulty of staffing hospitals; the need for treatment of children and the institution of beds at the Fulton Hospital for younger children and in the St. Louis Hospital for teen age children; the need of change in allowing the return of children to reformatories and of individuals to prisons; hopes to set up community psychiatric clinics which will ultimately be taken over by the community; the possibility of the Division of Mental Health having departmental status. He discussed the situation of the foreign born physician who has not obtained citizenship filling the needs of the system. He said the two basic concepts were modern care and treatment and work in prevention of mental illness.

AGENCIES REQUESTING DIRECT REPORTS

Correspondence between the State Rehabilitation Agency and the Missouri Welfare Department with Dean Wilson was presented. Dr. Tanner and Mr. Harris, representing the Missouri Welfare Department, presented their difficulties in obtaining medical reports directly from the Medical Center at Columbia while they could from other hospitals in the state. They said that often the physician is not the family physician and does not wish to be concerned with the follow-up report.

It was pointed out that Dr. Wilson was following a code that had been set up at the opening of the hospital which directed that reports go only to physicians.

Dr. Earl Loyd and Mr. Talley, representing the State Rehabilitation Agency, explained their difficulty which was similar in that they wished to receive reports directly to be more sure of having them and to save time in receiving them. They said that between 800 and 1,000 cases were being adjudicated a month. (It was pointed out that the law will probably be changed so that O.A.S.I. benefits will not be restricted to disabled persons over age 50 and that the volume of work will be increased.) They pointed out that the individual is responsible for proving his disability and that often some of this information was obtainable from hospital records. Following the discussion by the guests, these problems were discussed in the Council and upon motion of Dr. Barger, it was voted to suggest that a waiver form be made a part of the first communication from the physician and that this would authorize the Medical Center to provide medical records to these agencies.

BUREAU OF BLIND

In the discussion it was brought out that the Bureau for the Blind requires its work be done by a qualified ophthalmologist and that referrals are made to recognized ophthalmologists and to Washington University or the University of Kansas in certain instances. After discussion, on motion of Dr. Barger it was voted that direct referral was disapproved in cases in which a qualified ophthalmolgist was available but that in other cases, patients could be referred directly to the Medical Center.

LEGISLATION

Mr. O'Brien reported that the suggested medical examiner's law was being studied by Mr. Noble. The bill on licensure of physical therapists has been referred to the Committee on Physical Medicine and Rehabiltation. The two items referred by the Missouri Academy of General Practice are being studied by Mr. Noble.

On the national level, Mr. O'Brien reported that the Ways and Means Committee of the Congress on May 18 had voted 13 to 12 recommending that a bill be drafted as a modification of the Eisenhower bill. Such a bill will be introduced within a week and is to be acted upon by the Committee May 26. It appears at present that if the Keogh bill is passed, it will also cover doctors' assistants.

DISCUSSION WITH OSTEOPATHS

It was announced that the Osteopathic Association had asked for consultation with the Association and that the committee of osteopaths was composed of seven members while the Association committee is five. On motion of Dr. Hollweg, Drs. Perry and Francka were added to the committee.

COMMITTEES

Dr. Muether appointed the following committee on Redistricting: Dr. W. F. Francka, Hannibal, Chairman; H. E. Petersen, St. Joseph; Robert B. Bassett, St. Louis; John F. Pearl, St. Clair; J. L. Washburn, Versailles; Roy Pearse, Nevada; Richard H. Kiene, Kansas City; Kenneth Glover, Mount Vernon; James D. Butts, Rolla, and W. D. English, Cardwell. Dr. Muether appointed Dr.

Martin P. Hunter, Kansas City, to the Committee on Medical Economics, and Dr. Ralph Perry, Kansas City, to the Committee on Hospital and Professional Relations. On motion of Dr. Muether, these appointments were approved.

STUDENT LOAN FUND

Dr. Tillman asked for reopening of the discussion of a loan fund at the last Council meeting. After discussion, on motion of Dr. Whitener, it was voted that $25,000 be earmarked for loans to medical students who are residents of Missouri. An amendment to restrict these loans to use in Missouri schools only failed to pass. The possibility of using a Medical Education Foundation separate from the Missouri State Medical Association was suggested.

FEDERAL EMPLOYEES

It was called to the attention of the Council that the law which will give health insurance coverage to federal employees will go into effect July 1 and that employees will have a choice between Blue Cross-Blue Shield or a commercial insurance program.

CANCER DEMONSTRATION

Dean Wilson and Dr. Hardwicke called attention to a program they wish to institute, of teaching practitioners various technics in connection with cancer and that to obtain matching funds it was necessary to have the approval of the Association. On motion of Dr. Stuart, this approval was voted.

ANNUAL SESSION

The following report was given by Dr. Matthews and tabulations on the survey were presented to members of the Council.

Over-all, the questionnaire on the 1960 Annual Session drew an excellent response, both in the numbers of questionnaires returned and the completeness of the answers. The total mailing was 3,750, of which 961 were returned by the cutoff date of April 11. This is a 25.6 per cent return.

For those attending, 191 questionnaires were returned, for a 34.2 per cent response. For those not attending, there were 770 questionnaires returned, a 24.2 per cent response.

Replies were classified by those attending and those not attending by location of practice (metropolitan, outstate city and smaller town), by general or specialty practice, and by length of time in practice.

The make-up of the respondents by location was about 60 per cent metropolitan, 15 per cent from outstate cities, 25 per cent from smaller towns.

By type of practice—58 per cent of those attending were specialists, 65 per cent of those who did not attend are in specialties. The meeting attracted more specialists than general practitioners, and probably a higher proportion of the total number of specialists in Missouri.

Attendance

A breakdown in the number of days respondents stayed at the meeting shows that men from smaller locations tend to come and stay, while those from the home metropolitan areas may come in for one or two things on the program. Aside from the effect of this, the greatest number of people stayed for two days. A very significant number, however, stayed for the full three or four days.

Those in general practice seem to stay longer than specialists. The greatest number of general practitioners stayed three days, while the greatest number of specialists come for one day or two.

Attendance by age (years of practice) shows good representation. The attendance of the younger men, in the 1-10 years of practice group is very good.

Both those who attended and those who did not were asked to estimate how long they ordinarily could spend at the meeting. The majority say three days, although almost as many say two days.

Results for the attending and non-attending groups were somewhat different as to the most convenient three consecutive days for the meeting.

For the attending group, Sunday, Monday, Tuesday are by far the most popular days, with about 48 per cent of the vote. These three days ranked as second choice, however, for those not attending.

Monday, Tuesday, Wednesday—the present time of the scientific program—was second choice for the attending group with about 25 per cent of the vote. These days were third in popularity with those not attending.

Thursday, Friday, Saturday come in third among those attending, with about 14 per cent of the vote—but the same three days were first choice among those not attending.

A complicating factor in making a change in the present arrangement is the fact that Saturday, Sunday, Monday are the three most unpopular days form both groups with Wednesday, Thursday, Friday almost as unpopular. In view of the relatively high vote for the present three days, and the apparent vote against beginning the meeting on either Saturday or Wednesday, it might be best to maintain present arrangements so long as the House of Delegates convenes on the day preceding the scientific program.

As to the most convenient time of the year for the meeting, spring is the overwhelming choice.

Content

The questionnaire included a list of program events and respondents were asked to circle those which they would like to see more of on the program. Opportunity was also provided to indicate what things the respondents would like to see less of.

It should be pointed out that the question pertained to inclusion of more of the things listed. Because a particular feature did not receive many mentions, or appears at the bottom of the list in frequency of mention, does not necessarily mean that the respondents want the feature eliminated entirely. It may simply indicate that the respondents feel that the amount now given is at about the right level—they feel it should be on the program, but not in any greater amount. This is borne out by the fact that very few answers were received to the question "Meetings should include fewer" and that the answers that were received were quite general and did not usually pertain to content of the scientific program.

Responses were arranged by frequency of mention for each of the three location categories for both the attending and non-attending groups. This gives a total of six lists. The five features mentioned most frequently and the five mentioned least frequently were then determined.

More panel presentations and more refresher courses appear on all six of the high mention lists.

More medical economics, more medico-legal subjects and more specialty group presentations all appear on five of the six high mention lists, while out-of-state speakers appears on three of the six.

At the other end of the scale, the things least frequently mentioned were recreation and social events, both on all six lists, CPCs and Missouri speakers, on five of the six, audience participation presentations, which appears on four of the six lists, scientific exhibits which appears on two while lectures and specialty group presentations are shown on one list each.

The idea of grouping program subjects by field of interest with, for example, all surgical presentations at one time, all OB-GYN at another, apparently would be most popular.

In general the answers concerning the content of the meeting indicate that the respondents want serious scientific programs of a practical nature given by well-known men, including additional information on both medical economic and medical legal matters.

This conclusion is further strengthened by the reasons given for attending the meeting. Scientific reasons lead by far over any other classification, and in fact, over all other reasons put together. (Other reasons, however, such as House of Delegates meetings, fellowship, recreation, etc., do account for a significant number of those who attend.)

Answers on reasons for attending indicate that members probably tend to see the program as a whole, rather than being attracted by any one particular event.

Reasons given for not attending by those who did not come tended to be quite general. Press of practice and not interested led in frequency.

Association Functions

One question was asked of those attending to gain some indication of interest in Association affairs. This was whether the respondent had attended any meetings of the House of Delegates or its reference committees. There was no way of determining how many of the respondents were actually delegates or officers themselves, but the answers showed that only about 50 per cent of the respondents went to meetings of the House or reference committees.

Summary

In general, the survey produced a good response and should be a good indication of opinion.

Most members stay at the meeting two days or longer and indicate they ordinarily can stay about three days. There seemed to be no widespread expressed demand to shorten the meeting to less than three days.

In view of the House of Delegates extra day at present, and unless the entire program, including the House, can be condensed into a three-day total, the present Monday, Tuesday, Wednesday arrangements for the scientific program would seem to be best. Spring is the best time of year.

Members' interest seems to be mainly in serious scientific education. They would like to see more practical presentations by well known men and these grouped by field of interest.

Interest in the House of Delegates proceedings and Association affairs should be improved.

Finally, very little specific criticism was expressed, although we believe the opportunity was certainly available.

An outline showing the proportion of business and scientific sessions was presented.

After discussion, several actions were taken.

It was voted that the Council should bring to the attention of the Speaker of the House that alternate delegates might be seated by a majority vote of the House.

It was voted that the last session of the House be a breakfast meeting on Wednesday morning.

It was voted that there be a dinner for Presidents and Secretaries of County Medical Societies and new members and their wives on Sunday evening as guests of the Association, the dinner to be open to any others on a subscription basis.

MENTAL HEALTH

Dr. Haddock presented the following report of the Committee on Mental Health:

The Committee on Mental Health met at the Missouri Hotel, Jefferson City, April 10, 1960, with James N. Haddock, M.D., Chairman, Clayton, presiding. Those present were: Drs. Haddock, Robert J. Mueller, St. Louis; Henry Guhleman, Jefferson City; George W. Forman, St. Joseph; D. R. Edwards, Sedalia; A. L. Brown, Springfield; Frank M. Grogan, St. Louis; N. Venay Bolin, Kansas City; James M. A. Weiss, St. Louis; Addison M. Duval, Jefferson City; Messrs. T. R. O'Brien and Jordan Singleton, St. Louis, and Helen Penn, St. Louis.

Dr. Addison M. Duval, Director, State Division of Mental Diseases, was invited to meet with the Committee to give a report on the state program to date, as well as plans for the future.

Division of Mental Diseases

Dr. Duval reported on the progress of setting up the central office for the Division, saying that there had originally been only one secretary and the former director. The projected setup will include 23 people and at the present time there is about half that number. He said the central office is divided into the division of medical service and division of administration. He said that salary limitations, other than for medical personnel, had made obtaining of personnel slow, such limitations applying not only in the Division itself but to salaries in other offices of the state. He said that present quarters are inadequate and unsuitable and that a new building on a rental basis was under consideration. He reported that monthly meetings are held with the Department of Welfare and the Division of Health.

Child Care

Dr. Duval said that the law requiring hospitals to accept children from the juvenile court was effected before the hospitals were ready to accept them but that now 200 children are in residence in state hospitals, which is capacity. A study on evaluation and short term treatment is under way in the Fulton Hospital where 100 children are. Younger children are placed in the Fulton Hospital and it is proposed that teen age children be placed in the St. Louis Hospital. A conference on April 20 will try to clarify what care can be given children in the state hospitals, and the role of state, county and city in their care. The hope is for three hospitals for children, one in St. Louis, one in Kansas City and one at the University of Missouri. Dr. Duval said that this would require legislation.

Retarded Children

The situation on retarded children in the state was discussed. Dr. Duval said that the new Higginsville school will have capacity for 450 patients and that rehabilitation is being done there, but that the Carrollton school with 100 patients is a chronic domiciliary situation. He said the conditions in St. Louis and Marshall are extremely bad but that the school in Marshall is improving. He estimated that 2,200 additional beds for retarded children were needed. A school for retarded children to be erected in the southern part of the state is under consideration.

Hospitals

Dr. Duval said that there formerly had been no communication between the state mental hospitals. He said that in the last fiscal year there had been a 3 per cent increase in the rate of discharge but that so far this year the rate was 26.9 per cent greater than last year. The removal of certain patients to nursing homes was a factor in this. He said that 200 patients had been moved into nursing homes since August 29 and that possibly there are 1,500 patients that could be moved. He said that the Fulton hospital had placed more patients in nursing homes than the other hospitals. He said some resistance is being met and that consent of the family is required. He said that at the Farmington hospital, examination of patients is being done before entrance to the hospital and that indications are that from 40 to 50 per cent of patients can go directly to nursing homes. He said that the inpatient load in hospitals is decreasing though admissions are increasing.

Legislation

Dr. Duval said that he was working with Mr. Smith of the Commission and Senator Spradling on legislation and that the legislative research group is studying needed legislation. Among desirable and needed legislation, Dr. Duval listed the possibility of the Division of Mental Disease being separated from the Department of Public Health and Welfare and becoming a new Department of Mental Health; setting up of community psychiatric programs with clinics; the transfer of non-mental patients to reformatories; provision for returning sex psychopathic individuals to prisons, and abolishing the provision for the county paying for county patients in state hospitals at the rate of $6 per month since this provision is being abused in that patients that could pay for private care are being declared indigent; the adequacy or desirability of the present travelling clinic program was questioned, and it was thought that all purpose community clinics would be more desirable.

General Needs

Among general needs that the division faces, Dr. Duval named the 118 per cent overcrowding in St. Louis; the shortage of professional treatment staff; improvement of the security section at Fulton; research and training needed; architectural survey to determine what buildings need to be replaced and what repaired; central purchasing.

Conference

Dr. Duval announced a state-wide mental health conference on September 8 and 9 and asked for two delegates and two alternates from the Association. He said approximately a hundred will be asked to the conference representing state-wide organizations and individuals interested in mental health programming. He said that the ten-year plan would be presented at the conference, which will be both a full conference and workshop sessions.

Blue Cross

It was pointed out that a rider had been added to the St. Louis Blue Cross contract giving more allowance for mental health care and that the major medical contract now available in St. Louis does give increased coverage for psychiatric care.

Medicare

It was announced that mental health care had been restored to the Medicare program, effective January 1, 1960.

RESOLUTION ON HOSPITAL RECORDS

The following resolution concerning hospital records as passed by the House of Delegates was read as follows:

Resolution Re: Joint Commission on Accreditation of Hospitals

Whereas, There are duplications as indicated by the attached forms, on hospital records, which are required under the regulations of the Joint Commission on Accreditation of Hospitals, that necessitate redundant and duplication procedures by staff physicians, and

Whereas, An investigation study to ascertain wherein these circumstances exist and the adoption of indicated revisions in the regulations by the Commission, would be welcomed and beneficial to the staff physicians, therefore, be it

Resolved, That this House of Delegates instruct its delegates to the House of Delegates to the American Medical Association to introduce a resolution that will express to the Joint Commission on Accreditation of Hospitals, our physician members' sincere objection to unnecessary and redundant duplications of informational procedures which appear on the prescribed forms for hospital use, and, be it further

Resolved, That the Joint Commission on Accreditation of Hospitals be urged to promptly conduct a national study to evaluate the efficiency of present hospital records which are required to be executed by physicians, with the objective and purpose of eliminating all nonessential duplications in hospital records.

On motion of Dr. Stuart a suitable resolution to be submitted at the coming AMA meeting by our delegates, was approved.

PRIVATE FLYERS

A resolution asking reversal by the AMA House of Delegates on restriction of examination of private aviators was presented as follows:

Resolution Re: Medical Examiners Designated by the Federal Aviation Agency

Whereas, The House of Delegates of the American Medical Association, at the Interim Session in Dallas, Texas, 1959, adopted a statement that, "Examinations to determine the physical and mental fitness of Aircraft crew members should be made by Doctors of Medicine with special knowledge and proficiency in certain techniques"; and

Whereas, This statement is contrary to the long standing principle of free choice of physician; and

Whereas, The Federal Aviation Agency, as a direct result of this AMA statement, has issued an order to be effective June 15, 1960, such order having been published in the Federal Register for May 6, 1960, that physical examinations of Class 3 plane pilots must be performed by Doctors of Medicine who are designated as examiners by the Federal Aviation Agency; therefore be it

Resolved, That the House of Delegates of the American Medical Association be requested to rescind this action, and be it further

Resolved, That the Federal Aviation Agency be requested to rescind its order, as published in the Federal Register, May 6, 1960, that physical examinations of Class 3 plane pilots must be performed by physicians designated by the Federal Aviation Agency.

On motion of Dr. Stuart, this resolution was approved for Missouri delegates to present to the AMA House.

BOARD OF TRUSTEES

A letter from Dr. Victor B. Buhler urging support of Dr. Frank Coleman for AMA trustee was read. On motion of Dr. Whitener it was voted to give this information to delegates but that they be uninstructed.

HOSPITAL COMMITTEE

Mr. O'Brien reported that there had been discussion concerning a liaison committee of the hospital and medical associations. After discussion it was decided that such a committee be appointed, to be made up of five persons, including the President, President-Elect, the Chairman of the Council, the Executive Secretary and two others. It was pointed out that this committee should be publicized so that physicians would know to whom to report hospital problems.

HOSPITAL STORY

Various activities in the state concerning the "Quest for Health" program were reported but no action was taken.

COMMITTEE

The Chairman said that Dr. Hardwicke had asked for a committee to review a guide which he is preparing for use of federal and state funds which will be presented to HEW. Dr. Muether moved that such a committee be appointed and the Chair appointed Drs. Matthews, Stuart and Barger.

FIELD SECRETARY REPORT

Mr. McIntyre reported on several conferences on aging which he had attended. He reported the opening of the General Pershing Memorial Hospital at Brookfield; the St. Louis Academy one day symposium on May 1 in St. Louis attended by 600; his and Dr. Tillman's talks before the Medical Assistants and Secretaries Society; the clinical conference at Missouri University on May 11 and 12; a meeting at Whiteman's Air Force Base attended by 125 persons, and conferences on the Public Service Program.

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"DBI has been able to replace insulin or other hypoglycemic agents with desirable regulation of the diabetes when it is used in conjunction with diet in the management of adult and otherwise stable diabetes."[3]

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Among those diabetics who responded to tolbutamide initially and became secondary failures **DBI "gave a satisfactory response in 55%."**[4]

"DBI is capable of restoring control in a considerable portion of patients in whom sulfonylurea compounds have failed, either primarily or secondarily."[5]

"All twelve secondary tolbutamide failures have done well on DBI."[6]

"34 out of 59 sulfonylurea primary failures were successfully treated with DBI."[7]

A.M.A. ANNUAL SESSION

(Continued from page 1026)

(Ph.D.), president of Western Reserve University, Cleveland, Ohio, and guest speaker at the inaugural ceremonies, said the human dilemma of the sixties is an increasing desire for security and authority with a diminishing desire for responsibility.

At the Wednesday session of the House, Dr. Askey urged intensified, accelerated effort in five areas—medical education, preparations for the White House Conference on Aging next January, health insurance and third party relationships, mental health, and membership relations.

The Goldberger Award in Nutrition was presented to Dr. Richard Vilter of the University of Cincinnati. The Boy Scouts of America, celebrating its golden jubilee, presented the A.M.A. with a citation in appreciation of the medical profession's help and support. Dr. B. E. Pickett of Carrizo Springs, Texas, retiring chairman of the Council on Constitution and Bylaws, received an award in recognition of his long service.

ELECTION OF OFFICERS

In addition to Dr. Larson, the new president-elect, the following officers were named at the Thursday session:

Dr. William F. Costello, Dover, N. J., vice president; Dr. Norman A. Welch, Boston, reelected speaker of the House, and Dr. Milford O. Rouse, Dallas, Texas, reelected vice speaker.

Dr. Gerald D. Dorman, New York City, was elected to the Board of Trustees to succeed Dr. Larson, and Dr. James Z. Appel, Lancaster, Pa., was reelected to the Board.

Elected to the Judicial Council, to succeed Dr. Louis A. Buie, Rochester, Minn., was Dr. James H. Berge, Seattle.

Named to the Council on Medical Education and Hospitals were Dr. William R. Willard, Lexington, Ky., succeeding Dr. James M. Faulkner, Cambridge, Mass., and Dr. Harlan English, Danville, Ill., who was reelected.

On the Council on Medical Service, the House reelected Dr. Russell B. Roth, Erie, Pa., and Dr. Hoyt B. Woolley, Idaho Falls.

Dr. George D. Johnson, Spartanburg, S. C., was named to succeed Dr. Pickett on the Council on Constitution and By-laws.

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1. Walker, R. S.: Brit. M. J. 2:405, 1959.
2. Odell, W. D., et al.: A.M.A. Arch. Int. Med. 102:520, 1958.
3. Pearlman, W.: Phenformin Symposium, Houston, Feb. 1959.
4. DeLawter, D. E., et al.: J.A.M.A. 171:1786 (Nov. 28) 1959.
5. McKendry, J. B., et al.: Canad. M. A. J. 80:773, 1959.
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7. Krall, L. P.: Applied Therapeutics 2:137, 1960.

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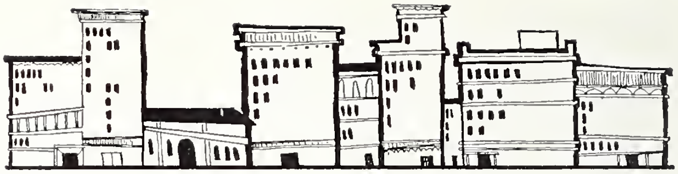

UNIVERSITY OF MISSOURI

Meetings and Talks

The Greater St. Louis and Heart of America Chapters of the Special Libraries Association held a combined meeting at the Medical Center on Saturday, April 23. Dr. Vernon E. Wilson, Dean of the School of Medicine and Director of the University Hospital extended the welcome to the group. Dr. Parker, University Librarian, spoke briefly on behalf of the University Library. Paxton Price, State Librarian of Missouri, led a panel discussion on various aspects of library cooperation.

On April 27, a Nutrition Symposium was held in the University of Missouri Medical Center Auditorium with several speakers. Dr. Herb F. Bird, professor of poultry husbandry at the University of Wisconsin, spoke on "Additives and Residues in Foods of Animal Origin"; Dr. Robert N. Goodman, associate professor of horticulture at the University of Missouri, spoke on "Additives and Residues in Foods of Plant Origin"; John F. Mahoney, manager of technical service, Chemical Division, Merck & Company, Inc., Rahway, New Jersey, spoke on "Industry Problems in Developing Intentional Food Additives"; Dr. Paul L. Day, scientific director, U. S. Food and Drug Administration, Washington, spoke on "Government View of Additives and Residues," and Dr. Julius M. Coon, professor of pharmacology at Jefferson School of Medicine, Philadelphia, spoke on "Medical View of Additives and Residues."

Guest lecturer for the Sigma Xi lecture series, which was held in the Medical Center Auditorium on April 28, was Professor Barnett F. Dodge, Chairman, Chemical Engineering Department, Yale University, who spoke on "Fresh Water From the Ocean and Other Saline Waters."

On May 2 and 3, the Missouri Funeral Directors and Embalmers Association Education Program was held in the Medical Center Auditorium.

The monthly meeting of the Boone County Medical Society was held May 3 in the Medical Center Auditorium at which time it was announced that the Annual Picnic would be held on June 21. All lawyers in Columbia were also being invited to attend.

The Fifth Annual Spring Clinical Conference was held at the Medical Center Auditorium on May 11 and 12, 1960, sponsored by the Missouri Heart Association, Missouri Academy of General Practice, Missouri State Diabetes Association and the University of Missouri School of Medicine. The following faculty members participated in the two day program: On Wednesday, May 11, Dr. Gwilym S. Lodwick, associate dean and professor and chairman of the Department of Radiology, extended the welcome. Dr. Kenneth K. Keown, professor of anesthesiology, presided at the morning session where Dr. Harry G. Stoeckle, associate professor of pediatrics, spoke on "Heart Disease in Children," and Dr. John A. Buesseler, associate professor of ophthalmology, spoke on "Office Ophthalmology." During the afternoon session Dr. Owen A. Kearns, professor and chairman of the Department of Preventive Medicine, and Dr. Clement E. Brooke, associate professor of pediatrics, participated in a panel discussion on "Poliomyelitis—Live Versus Salk Vaccine" for which Dr. Kearns served as moderator. The Thursday morning, May 11 session was presided over by Dr. H. O. Loyd, clinical associate professor of medicine. Dr. Robert L. Jackson, professor and chairman of the Department of Pediatrics, and Dr. John A. Buesseler served on a panel on "Complications of Diabetes" for which Dr. Jackson acted as moderator. Dr. Ian M. Thompson, associate professor of surgery (urology), spoke on "Office Urology." The Thursday afternoon session was presided over by Dr. Jacob S. Roden, professor and chairman of the Department of Obstetrics-Gynecology. Dr. John J. Modlin, clinical associate professor of surgery, served as moderator on a panel discussion "Recurrent Carcinoma of the Breast—Diagnosis and Treatment." Other panel members were Dr. Donald Q. Cochran, assistant professor of radiology, and Dr. Thomas W. Burns, associate professor of medicine.

At an Assembly Lecture given in the Medical Center Auditorium on May 12, Mrs. Martha M. Brown, associate professor of nursing and research project director, Washington University, spoke on "One Method of Studying the Personalization of Older Patients."

Visitors to the Medical Center

On April 20, 1960, there were two guests in the Department of Surgery. Dr. James O. Davis, chief of cardiovascular research section of the National Institutes of Health, Bethesda, Maryland, spoke on "Current Concepts on Aldosterone," and Dr. Frederick M. Golomb, University of Bellevue Medical Center, New York, spoke to faculty, staff and medical students on "Isolated Tumor Perfusion Work."

During the week of May 8 through May 14, Dr. Frederick A. Coller, professor emeritus of surgery at the University of Michigan, was a guest of the Department of Surgery at the University of Missouri as their first visiting professor of surgery. Dr. Coller spoke on "William Beaumont, First Missouri Medical Researcher," on May 10, in the Medical Center Auditorium and also spoke at the Fifth Annual Spring Clinical Conference on May 11. His topic at this conference was "Thromboembolism."

Trips and Talks by the Faculty

On April 19, Dr. Vernon E. Wilson, Dean of the School of Medicine and Director of the University Hospital, was at Whiteman Air Force Base where he visited to discuss consultant and teaching programs.

Dr. Wilson presented greetings at the X-Ray Technicians Meeting at the Tiger Hotel on April 23.

Dr. Wilson and Dr. Gwilym S. Lodwick, associate dean and professor and chairman of the Department of Radiology, attended the Medical School Foundation meeting in the Medical Center Auditorium on April 23.

"Current Trends in Medical Education" was the topic on which Dr. Wilson spoke at a luncheon of the St. Louis Academy of General Practice held in the Chase Hotel, St. Louis, on April 30. Dr. Wilson participated in the Missouri Public Health Symposium held at Jefferson City on May 11.

Dr. and Mrs. Wilson attended the Alpha Omega Alpha initiation and banquet which was held in the Memorial Student Union on May 14. Dr. Wilson was the speaker at the banquet where his topic was "What's in It for Me?"

Dr. Lodwick attended and represented the University Medical Center at the meeting of the Memorial Hospital Association at Brookfield on Sunday, May 1.

Dr. E. W. Lowrance, professor of anatomy, was at Baker University, April 29 and 30 where he presented a paper entitled "Development of a Sex Difference in the Rabbit Pelvis" at the Kansas Academy of Science.

Dr. Jona C. Thaemert, assistant professor of anatomy, attended a meeting at Grand Forks, North Dakota, where he gave a talk on "Electron Microscopy of Smooth Muscle." He also visited the Department of Anatomy, School of Medicine, University of North Dakota, from April 29 to May 3.

Dr. Frank B. Engley, Jr., professor and chairman of the Department of Microbiology, and Dr. James T. Barrett, associate professor of Microbiology, attended a symposium on "Biochemical Aspects of Pathogenicity" at the New York Academy of Sciences, April 27 through 30. Dr. Engley also attended a symposium on undergraduate and graduate training in microbiology held at the Adelphia Hotel in Philadelphia on April 30 sponsored by the American Academy of Microbiology and participated in a meeting of the Committee on Germicides of the American Public Health Association at the Bellevue-Stratford on Sunday, May 1, 1960.

Several members from the Department of Microbiology attended the National meeting of the Society of American Bacteriologists held at the Bellevue-Stratford and Adelphia Hotels in Philadelphia, Pennsylvania, May 1 through 6, 1960. Those attending were Dr. Barrett, Dr. Donald P. Durand, assistant professor, Wayne Stenback, assistant instructor, and Dr. Engley. Scientific papers presented by members of the department were as follows:

"The *In Vitro* Agglutination of Leucocytes From Drug Sensitive Guinea Pigs" was presented by Miss Mary Rigney, graduate student, Richard A. Guthrie, medical student, and Dr. Barrett.

"The Plaque Size Variation of Newcastle Disease Viruses" was presented by Dr. Durand with Dr. Abraham Eisenstark of the Department of Bacteriology of Kansas State University, Manhattan.

"Studies on a Skin Test for Leptospirosis" by Dr. P. B. Kuppuswamy, a veterinarian from Patna, India, an I.C.A. graduate student, in conjunction with Dr. H. S. Goldberg of the Department of Microbiology of the School of Medicine, and Dr. Donald C. Blenden of the Department of Veterinary Bacteriology, School of Veterinary Medicine.

Dr. Durand attended the Missouri Public Health Association meeting at Jefferson City on May 10 where he presented a talk on the "Present Status of Virology" and participated in a "Group Discussion on Virology."

At the National Institutes of Health meeting held at Washington, D. C., on May 6, Dr. Barrett visited the National Institutes of Health especially the Allergy and Infectious Disease, Dental Institutes and Research Grant Section.

Dr. Herbert S. Goldberg, associate professor of microbiology, who is on sabbatical leave at Cambridge University, England, participated in an International Fermentation Symposium and conferred with Dr. E. B. Chain on antibiotic research at a meeting in Rome, Italy, during the week of May 10-15.

Dr. Engley attended the Missouri Public Health Association meetings in Jefferson City, May 10 and 11, at which time he was elected Chairman of the Laboratory Section and attended the Executive Meeting of the Missouri Public Health Association following the annual meeting.

Dr. David G. Hall, assistant professor of obstetrics and gynecology, attended a meeting on Medical Education for National Defense (MEND) the week of April 24-30 at Fort Sam Houston, Texas.

Several members of the Department of Pathology attended the American Association of Pathologists and Bacteriologists meeting at Memphis, Tennessee, April 25 through 29. Those attending were Dr. Joseph E. Flynn, professor and chairman, Dr. Ira D. Godwin, instructor, and Dr. John F. Porterfield, assistant instructor.

Dr. M. Pinson Neal, professor emeritus of pathology, attended the Missouri State Medical Association meeting at Jefferson City, on April 24. He attended the meeting of Committee on Scientific and Postgraduate work planning for the 1961 Annual Session of the Missouri State Medical Association and Postgraduate programs for the coming year. Dr. Neal has served as a member of this committee since 1932.

At the American Association of Blood Banks meeting held at Kansas City, April 20, Dr. Vincent P. Perna, assistant professor of pathology, conducted inspection of the Community Blood Bank, Kansas City, for the purpose of accreditation by the American Association of Blood Banks.

Dr. Robert L. Jackson, professor and chairman of the Department of Pediatrics, attended the Callaway County Medical Society meeting held at Fulton on April 21 where he discussed "Pediatric Problems of Current Interest."

Dr. Jackson, Dr. Clement E. Brooke, Dr. Harry Stoeckle, associate professors, and Dr. Fikri M. Hanna, assistant professor of pediatrics, attended the Annual Meeting of the Pediatric Educational Societies sponsored by the American Pediatric Society and Society for Pediatric Research meeting at Swampscott, Massachusetts, May 3 through 6.

Dr. James E. Randall, associate professor of physiology and biophysics, attended the First National Meeting of the Institute of Radio Engineers Professional Group on Medical Electronics, held April 20-22, in Houston, Texas. While there, he inspected the electronic teaching facilities in the Department of Physiology of the Baylor University School of Medicine.

Dr. James M. A. Weiss, associate professor and acting chairman of the Department of Psychiatry, attended a meeting in Mexico City, Mexico, from May 2 through 11 of the Pan American Medical Association Congress where a paper was presented by Dr. Nathan Blackman, assistant professor of clinical psychiatry, Washington University School of Medicine, St. Louis. Dr. Weiss and Dr. Joseph W. Lamberti, instructor in psychiatry at Washington University were co-authors.

At the American Psychiatric Association meeting held at Atlantic City, New Jersey, May 9-13, Dr. Weiss was elected to Fellowship in the American Psychiatric Association and appointed a member of the Committee on Aging, by Dr. Robert Felix, President of the Association. Dr. Weiss also delivered a paper on "Dynamic Patterns of Symptom Formation Associated With Aging" on May 12.

Dr. Hugh E. Stephenson, professor and chairman of the Department of Surgery, attended the Second International Symposium on Concepts of Medicine sponsored by the Deborah Hospital Symposium on Congenital Heart Disease held at Philadelphia, April 28 through 30.

During the week of May 4-7, Dr. Kenneth K. Keown, professor of anesthesiology, attended the Arizona Medical Association meeting at Scottsdale, Arizona, where he made several presentations as follows: "Regional Anesthesia Combined With Intramuscular Sodium Pentathol for the Pediatric Orthopedic Patient," "The Anesthesiologist—Physician or Technician," "Hypnosis in Surgery and Obstetrics," and "The Recognition and Treatment of Heart Failure in the Operating Room."

On April 26, Dr. Carl H. Almond, assistant professor of surgery, spoke at the Levering Hospital at Hannibal, Missouri. The topic on which he spoke was "Metastatic Carcinoma of the Breast."

Dr. Warren P. Sights, assistant professor of surgery (neurosurgery), attended the Harvey Cushing Society Meeting which was held at San Francisco, California, the week of April 12-17.

On April 27 and 28, Dr. Ian M. Thompson, assistant professor of surgery (urology), attended

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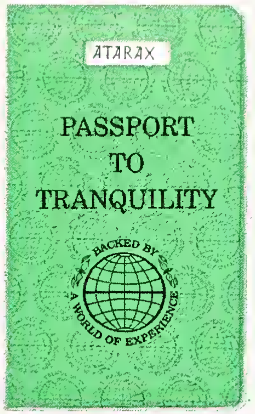

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IN ELDERLY PATIENTS well tolerated by debilitated patients	"...seems to be the agent of choice in patients suffering from removal disorientation, confusion, conversion hysteria and other psychoneurotic conditions occurring in old age." Smigel, J. O., et al.: J. Am. Geriatrics Soc. **7**:61 (Jan.) 1959.	Settel, E.: Am. Pract. & Digest Treat. **8**:1584 (Oct.) 1957. Negri, F.: Minerva med. **48**:607 (Feb. 21) 1957. Shalowitz, M.: Geriatrics **11**:312 (July) 1956.
IN ALLERGIC PATIENTS useful adjunctive therapy for asthma and dermatosis; particularly effective in urticaria	"All [asthmatic] patients reported greater calmness and were able to rest and sleep better...and led a more normal life.... In chronic and acute urticaria, however, hydroxyzine was effective as the sole medicament." Santos, I. M., and Unger, L.: Presented at 14th Annual Congress, American College of Allergists, Atlantic City, New Jersey, April 23-25, 1958.	Eisenberg, B. C.: J.A.M.A. **169**:14 (Jan. 3) 1959. Coirault, R., et al.: Presse méd. **64**:2239 (Dec. 26) 1956. Robinson, H. M., Jr., et al.: South. M. J. **50**:1282 (Oct.) 1957.
IN HYPEREMOTIVE ADULTS does not impair mental acuity	"...especially well-suited for ambulatory neurotics who must work, drive a car, or operate machinery." Ayd, F. J., Jr.: New York J. Med. **57**:1742 (May 15) 1957.	Garber, R. C., Jr.: J. Florida M. A. **45**:549 (Nov.) 1958. Menger, H. C.: New York J. Med. **58**:1684 (May 15) 1958. Farah, L.: Internat. Rec. Med. **169**:379 (June) 1956.

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the Kansas City Urological Meeting held in Kansas City.

Dr. Thompson and Dr. Gilbert Ross, resident in surgery, attended the annual meeting of the American Urological Association in Chicago, Illinois, where Dr. Thompson presented a paper entitled "The Analytical Survey of 178 Testicular Tumors" and both he and Dr. Ross participated in a display by the Department of Urology.

Dr. James Ross, instructor and first year resident in surgery, Dr. Karl Moedl, and Dr. Earl J. Wipfler, assistant instructors, Dr. Clarence E. Thompson and Dr. Richard Ellis, assistant instructors and first year residents in surgery, attended the Chicago Committee meeting on Trauma of the American College of Surgeons in Chicago, Illinois, April 27-30.

McComas Essay Contest Recipient

The award dinner for the Arthur Rochford McComas Memorial Medical History Essay Contest was held in the Student Union, Friday, May 6. This contest which is to be an annual event, was inaugurated last spring. It is open to all students enrolled in the School of Medicine.

The dinner was cosponsored by the School of Medicine and the Medical History Group. Those present included faculty members and students from several parts of the University and a number of guests.

Dr. M. Pinson Neal served as master of ceremonies. Dr. Frank Mays delivered the main address in which he told of his training and work with Dr. McComas. Mr. A. G. McComas, of Elk City, Oklahoma, nephew of Dr. McComas, said a few words about his uncle. Dean Wilson made the presentation of the award certificate and $100 prize to the essayist selected by a panel of five judges. The winner, Warren A. Heffron, of Marshall, Missouri, is a second year student in the School of Medicine. His essay was entitled "Dr. Sappington's Anti-Fever Pills."

ST. LOUIS UNIVERSITY

Honors

Thirteen members of the School of Medicine's graduating class were recipients of achievement awards at the annual senior banquet held at the Congress Hotel May 21.

Beaumont Awards went to five medical students for research conducted during one of the four years of the medical curriculum. Award winners were selected on the basis of the research papers they wrote covering their scientific work. The annual competition is named in honor of Dr. William Beaumont, who has been acclaimed as the American making the greatest contribution to modern physiological concepts.

Henry N. Wellman, Kansas City, was the winner of the first prize, the Borden Undergraduate Award of $500 and an honorary certificate for his research paper entitled "The Acute Effects of Lethal and Sublethal Doses of Microwave Radar Radiations in the Cardiovascular and Respiratory System of Albino Rats." Wellman's name will be inscribed on a plaque in the Medical School. The award is the gift of The Borden Company Foundation, Inc.

In conducting his research, Wellman measured the effects of microwave radar on rats with particular emphasis on the pathologic states induced by these rays on the cardiovascular and respiratory systems. The student observed increased work-load on the heart and faster breathing rates and the development of heart failure, shock and asphysia before the death of the rats. In using smaller doses of radiation, Dr. Wellman observed that a mild shock was produced but the rats survived.

Dr. Peter J. Tegtmeyer, St. Louis (left), was the recipient of an Honors Graduate Award Scroll and a $100 bond from the Missouri State Medical Association at achievement awards ceremony held at the annual St. Louis University senior banquet. Dr. James W. Colbert, Jr., Dean, St. Louis University School of Medicine (center) made the presentation. At right is Dr. Roy V. Boedeker, assistant professor of clinical gynecology and obstetrics and president of the medical alumni.

Four medical school seniors tied for second place in their research studies in the Beaumont competition receiving $125 each and an honorary certificate. They were: Dr. Joseph L. Allain, Jr., New Orleans, La.; Dr. Roger A. Ewald, LaSalle, Ill.; Dr. Duane Hagen, Hardin, Ill., and Dr. Peter J. Kozak, Bridgeport, Conn.

Dr. Allain conducted a chemical study in which the conditions governing the reduction of oxygen on a bile acid to an hydroxl group were determined.

Dr. Ewald engaged in a study which concerned itself with a blood fraction of the blood plasma in newborn infants. The levels of serum complement in normal newborn infants was determined and found to be 50 per cent of that in normal adults and mothers at time of delivery. On the other hand, Ewald observed that infants with Rh incompatibility were found to have much higher levels than their normal counterparts while the infants with disease in which the blood cells were destroyed had normal levels.

Dr. Hagen studied the effects of ESF, a substance found in the plasma and urine of anemic animals, which increases the production and release of red cells from bone marrow.

The factors controlling the production of red blood cells in humans are not completely understood by medical science, but it is known that one of the controls is ESF. In certain diseases of man too many red cells may be present.

Dr. Hagen studied the effects of this substance by introducing radioactive iron into hemoglobin as an assay. The effects of ESF on animals with too many red blood cells were determined. Additional controlling mechanisms in this type of animal which limits the response of the red cell forming tissues to ESF was made from Dr. Hagen's research work.

Dr. Kozak wrote a research paper entitled "Hematological Changes in Albino Rabbits Secondary to Change in Environmental Temperature."

Investigators have recently described a new disease called arctic-anemia but the relative importance of lack of oxygen, cold temperature and exercise could not be assessed.

In Dr. Kozak's research, repetition of these conditions in albino rabits showed that similar anemia as well as decreased plasma volume occurred in this species with the appearance of young red-blood cells in the circulation. Further investigation suggested that the changes in the blood were due to a decrease in the life span of the individual red blood cell as the major cause of the anemia. If animals were continued for a longer period in cold environments these changes were observed to revert to normal.

Eight other medical school seniors were honored. Dr. Peter J. Tegtmeyer, St. Louis, was the recipient of an honorary scroll and a $100 bond presented by the Missouri State Medical Association on the basis of scholarship.

Dr. Max M. Inman, Salem, Mo., was the recipient of a gold engraved watch and scroll presented by the Roche Laboratories for scholarship and character and a certificate naming him to *Who's Who in American College and Universities.*

Other recipients of *Who's Who* certificates were Dr. George W. Parker, Delaware, Ohio; Dr. Winfred Stringer, Vandalia, Ill., and Dr. Tegtmeyer.

Recipients of Mosby Book awards were Dr. Donald R. Adams, San Francisco; Dr. Robert R. Maginn, St. Louis; Dr. Alan J. Peterson, El Segundo, Calif.; Dr. Stringer, Vandalia, Ill., and Dr. Tegtmeyer.

Recipients of Merck Book awards were Dr. Stringer and Dr. Tegtmeyer.

Dr. Edward A. Doisy, Sr., professor of biochemistry and director of the department, received an honorary Doctor of Science Degree from the University of Illinois at its commencement exercises. Dr. Doisy received a bachelor of arts degree at the University in 1914 and a master of science degree in chemistry there in 1916.

The citation said Dr. Doisy "has rendered incalculable service to mankind by his successful attacks on major chemical problems of medical science."

His studies of the antihemorrhagic vitamins, including their first isolation as pure substances, constituted an achievement recognized by a Nobel Prize in 1943.

Dr. George E. Thoma, assistant professor of internal medicine and head of the section of nuclear medicine at the School of Medicine, has been elected President of the Central Chapter of the Society of Nuclear Medicine.

The society is composed of scientists working in nuclear medicine in the Midwest. Dr. Thoma has also served as a member of the society's Board of Governors and as Secretary of the society.

He is editor of *The Journal of Nuclear Medicine* and consultant to many national nuclear laboratories including U. S. Public Health Service, Division of Radiological Health; Lockheed Aircraft Corporation for Nuclear Medicine; Medical Division of Oak Ridge Institute of Nuclear Studies and others.

He organized the School of Medicine's Radioisotope Laboratory at Firmin Desloge Hospital in 1949. The laboratory is engaged in clinical research in which radioactive isotopes are used in diagnosis and treatment.

WASHINGTON UNIVERSITY

New Grants

Washington University School of Medicine has received $179,900 in new, supplemental and renewal research grants from the United States Public Health Service, Dean Edward W. Dempsey has announced. The grants became effective in June.

Largest new research grant of $11,624 was awarded Dr. Sam Clark, Jr., assistant professor of anatomy. Dr. Clark will use the electron microscope and the technic of fluorescent staining to determine which type of cell in the lymph nodes make antibody.

Dr. Luciano L'Abate, assistant professor of medical psychology, received a new grant of $6,449. Previous research has shown that people learn and apply different materials according to their personality characteristics. Dr. L'Abate will extend the investigation to a greater number of personality factors and tasks than have been studied previously. Data will be collected from a college population.

A $2,297 new grant to Dr. John W. Berry, instructor in clinical medicine, will be used to determine by a fluorescent technic, if HeLa cells continue to survive after transplantation.

Dr. Catherine Smith, research assistant professor of otolaryngology, was awarded $40,437 to purchase an electron microscope for a study of the individual hair cells of the ear. Additional phases of this study are new being investigated by Dr. Smith through a previously announced Public Health Service grant.

Dr. H. Mitchell Perry, Jr., assistant professor of medicine, and Dr. Henry G. Schwartz, professor of neurosurgery, were awarded additional funds of $3,616 and $1,776 respectively, for investigations now underway through Public Health Service grants.

Grants which will be renewed in June by the Public Health Service include $35,650 to Dr. Bernard Becker; $18,831, Dr. Seymour Reichlin; $15,656, Dr. Falls B. Hershey; $14,500 and $12,000, Dr. Robert M. Burton; $12,200, Dr. Oliver H. Lowry; $2,875, Dr. Gordon M. Shoepfle, and $1,989, Dr. Eugene M. Bricker. Grants support investigations in the departments of internal medicine, ophthalmology, pharmacy, physiology and surgery.

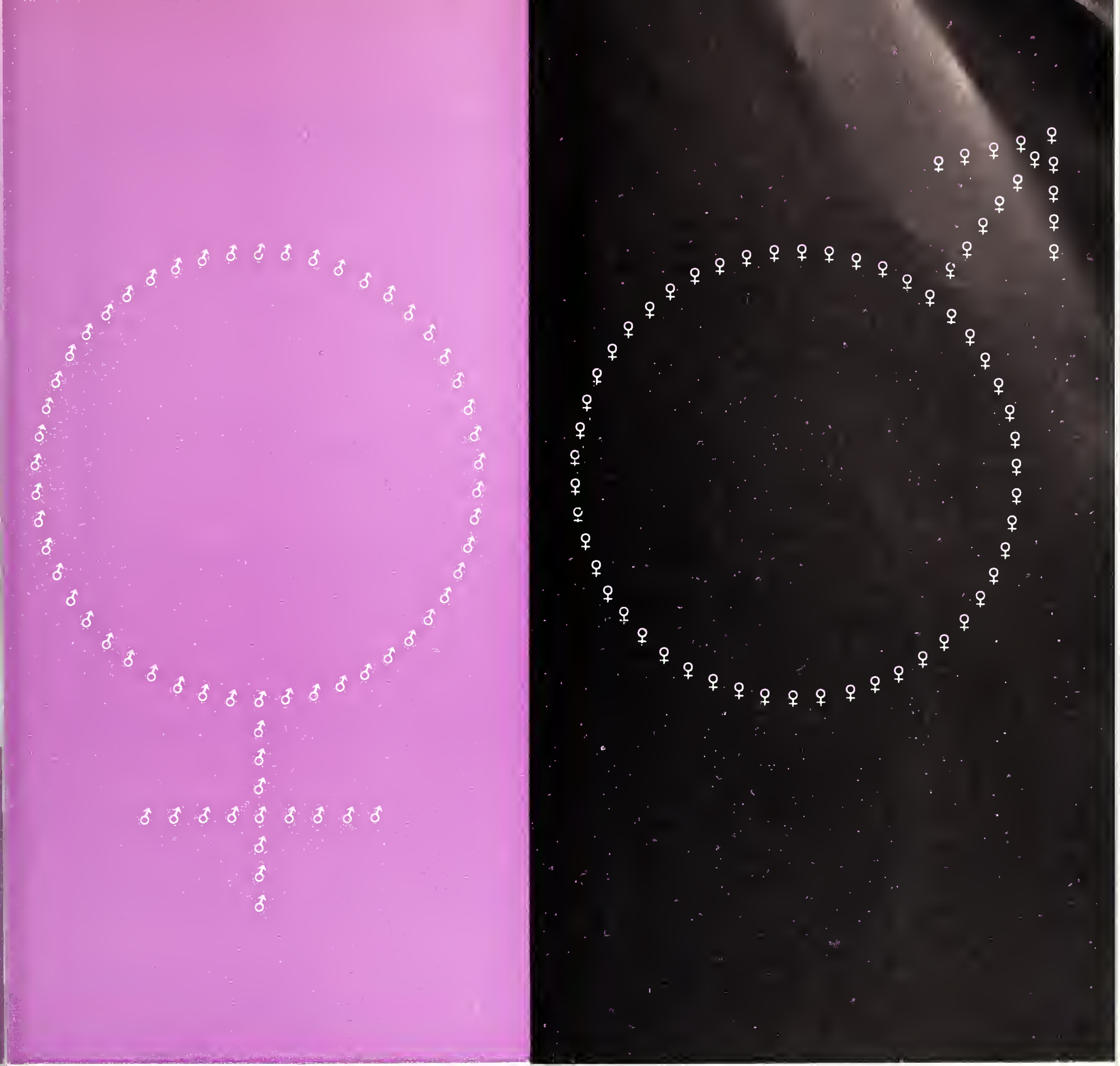
A new fellowship program for residents in pediatrics at Washington University School of Medicine was inaugurated in May through the Dr. Herbert A. Mazur Children's Fund. The Mazur Fellowships will provide the costs of each resident's training in the field of emotional disturbances of children. This will include training in the new child psychosomatic unit which will open in the near future at St. Louis Children's Hospital. The Herbert A. Mazur Children's Fund was incorporated in August of 1959, following the unexpected death of the 40-year-old St. Louis pediatrician for whom the Fund is named. Members are primarily former patients, associates and friends of the late Dr. Mazur, who was a staff member at Children's and Jewish Hospitals and a member of the Washington University faculty. Mr. Harvey M. Fisher, Fund President, said that the fellowship plan was initiated because of Dr. Mazur's great interest in the part emotional disturbance plays in the physical health of children.

Promotions

Six Washington University School of Medicine faculty members have been promoted to full professorships, effective July 1, it was announced by Chancellor Ethan A. H. Shepley. They are Dr. Walter P. Covell, as professor of anatomy and professor of otolaryngology; Dr. John E. Hobbs, as professor of clinical obstetrics and gynecology; Dr. F. Edmund Hunter, Jr., as professor of pharmacology; Dr. Joseph H. Ogura, as professor of otolaryngology; Dr. Jack L. Strominger, as professor of pharmacology; and Dr. Sidney F. Velick, as professor of biological chemistry. Dr. Covell, who received the doctor of medicine degree from the University of Chicago, has been on the university faculty since 1945. He was associate professor of medical research at the University of California from 1933 to 1943. A recipient of the doctor of medicine degree from the university, Dr. Hobbs has been faculty member since 1929. Dr. Hunter, who holds the degree of doctor of philosophy from the University of Rochester, has been a member of the university's pharmacology department since 1941. Dr. Ogura received the doctor of medicine degree from the University of California where he was fellow in medicine and pathology. He came to Washington University in 1946 from the University of Cincinnati College of Medicine where he was an instructor. Dr. Strominger, who holds the doctor of medicine degree from Yale University, was senior assistant surgeon in the U. S. Public Health Service from 1951 to 1954. He has been at Washington University since 1955. Dr. Velick received the doctor of philosophy degree from the University of Michigan. A former International Cancer Foundation Fellow in Chemistry at Yale, Dr. Velick has been at Washington University since 1946.

Three members of the medical school faculty were promoted to associate professorships. They are Dr. Stanley Lang, as associate professor of physiology; Dr. Alexander Rafailo Margulis, as associate professor of radiology; and Dr. Robert Munger O'Neal, as associate professor of pathology.

Twenty-two faculty members have been promoted to assistant professorships. They are Dr. Carl Frieden, as assistant professor of biological chemistry; Dr. Brent M. Parker, as assistant pro-



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[*] Marmell, M., and Prigot, A.: Tetracycline phosphate complex in the treatment of acute gonococcal urethritis in men. Antibiotic Med. & Clin. Ther. 6:108 (Feb.) 1959.

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fessor of medicine; Dr. William K. Danforth, as assistant professor of medicine; Dr. Joseph C. Edwards, as assistant professor of clinical medicine; Dr. Ralph V. Gieselman, as assistant professor of clinical medicine; Dr. Melvin L. Goldman, as assistant professor of clinical medicine; Dr. James M. Hutchinson, as assistant professor of clinical medicine; Dr. Norman P. Knowlton, Jr., as assistant professor of clinical medicine; Dr. H. Marvin Camel, as assistant professor of clinical obstetrics and gynecology; Dr. David Rothman, as assistant professor of clinical obstetrics and gynecology; Dr. William L. Smiley, as assistant professor of clinical obstetrics and gynecology; Dr. Seth W. Wissner, as assistant professor of clinical obstetrics and gynecology; Dr. Allan C. Goodman, as assistant professor of audiology in otolaryngology; Dr. Donald H. Eldredge, as research assistant professor of otolaryngology; Dr. John M. Kissane, as assistant professor of pathology; Dr. Bernard Shore, as assistant professor of physiology; Dr. Virgie G. Shore, as research assistant professor of physiology; Dr. Jacob O. Sines, as research assistant professor of medical psychology; Dr. Herbert E. Rosenbaum, as assistant professor of clinical neurology; Dr. Warren G. Stamp, as assistant professor of orthopedic surgery; Dr. C. Allen McAfee, as assistant professor of clinical surgery; and Dr. Robert K. Royce, as assistant professor of clinical genitourinary surgery.

Awards

Dr. Jack Strominger of Washington University School of Medicine has been awarded the 1960 John J. Abel Prize for outstanding research in pharmacology, Dean Edward W. Dempsey has announced. Dr. Strominger received the award for his work on the mechanism of penicillin action. The $1,000 prizes and a bronze medal are donated each year by Eli Lilly and Company, Indianapolis, to stimulate fundamental research in pharmacology and experimental therapeutics. Candidates are nominated yearly by members of the American Society for Pharmacology and Experimental Therapeutics. Each nominee must have accomplished outstanding research in the field of pharmacology or experimental therapeutics and must be under 37 years of age on April 30 of the year of the award. Dr. Strominger received the A.B. degree from Harvard and the M.D. degree from Yale University. He came to St. Louis in 1948 to intern at Barnes Hospital, and was appointed research fellow in the department of pharmacology at Washington University Medical School in 1949. From 1951 to 1954, he served as senior assistant surgeon at the National Institute of Arthritis and Metabolic Diseases, Bethesda, Md., returning to the Medical School in 1955 as assistant professor of pharmacology and Markle Scholar in Medical Science. In 1955, Dr. Strominger was also granted a leave of absence to conduct research at the Carlsberg Laboratory, Copenhagen, and at the Molteno Institute, Cambridge University, England, as a Fellow of the Commonwealth Fund. He was promoted to associate professor of pharmacology in 1958 and to the rank of full professor in May.

Miss Barbara S. Kendall, who has been a member of the psychology staff at Washington University School of Medicine for 32 years was honored at a testimonial dinner in May, prior to her retirement. Miss Kendall joined the Medical School staff in 1928 as assistant in applied psychology and has been a staff member of Malcolm Bliss Mental Health Center since 1948. She received her appointment as instructor in clinical psychology at the Medical School in 1955. A graduate of Radcliffe College, she received the master's degree from Harvard University and is a diplomate in clinical psychology of the American Board of Examiners in Professional Psychology.

Also in May seven students and five junior students at Washington University School of Medicine were elected to Alpha Omega Alpha, honorary society recognizing outstanding scholarship and leadership in medicine and related fields. Certificates and keys were presented at the annual A.O.A. banquet. Banquet speaker was Prof. Alexander M. Buchan of the Washington University English Department, who spoke on "Dr. James Currie, Physician and Editor." Senior students initiated were: Floyd E. Bloom, Dallas, Texas; J. David Bybee, Beaumont, Texas; Paula L. Clayton, St. Louis; B. Calvin Harmon, Fort Worth, Texas; Eric A. Pfeiffer, St. Louis; Eli Shuter, Spring Valley, New York; and Barry W. Steiger, Danville, Illinois. Junior students were: Michael Colvin, Princeton, Indiana; W. Bradford DeLong, Evanston, Illinois; Philip W. Majerus, Quincy, Illinois; Joseph J. McNamara, Neosho, Missouri; and Gerald A. Wolff, St. Louis. Five senior students who were elected to A.O.A. in January and also received their certificates and keys at the May meeting were: Gordon R. Miller, Miami, Florida; Eugene J. Sayfie, Charleston, W. Virginia; Carolyn Terry, Louisville, Kentucky; Winston A. Tustison, Billings, Montana; and R. Dean Wochner, Tempe, Arizona.

Lecturer

Dr. Milton J. E. Senn, Sterling professor of pediatrics and psychiatry at Yale University, was in St. Louis recently to discuss the need for and

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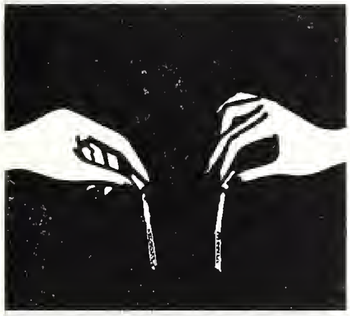

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purposes of the new Child Psychosomatic Unit which will be opened within the next few months at St. Louis Children's Hospital in the Washington University Medical Center. The establishment of the unit was largely made possible because of a grant from the Children's Research Foundation of up to $60,000 over a three year period. Dr. Alexis F. Hartmann, professor and head of the department of pediatrics at Washington University, said that detailed plans concerning the new unit will be announced by Children's Hospital in the near future. The Children's Research Foundation was instrumental in bringing Dr. Senn to St. Louis in 1949 to study the problems of the Child Guidance Clinic of Washington University School of Medicine. Dr. Senn's counselling culminated in the establishment of a Child Guidance Clinic which emphasized teaching and research as well as services; the selection in 1958 of Dr. E. James Anthony as Blanche F. Ittleson professor of child psychiatry, the first such endowed professorship in the United States; and in the opening of the William Greenleaf Eliot Division of Child Psychiatry at the Medical School in 1959, an objective to which Dr. Hartmann had been working for many years. In appreciation of Dr. Senn's work, he was presented a scroll by Dr. Edward W. Dempsey, Dean of the Medical School. Dr. Senn also participated in a symposium arranged by Dr. Hartmann on psychosmatic problems. Members of the pediatrics staff and the board of Children's Research Foundation were in attendance.

Senior Awards Program

Dr. David T. Hammond, Bluffton, Ind., and Dr. Karl H. Muench, Evanston, Ill., members of the 1960 graduating class at Washington University School of Medicine, received highest scholastic honors at the annual award ceremonies in June. Dr. Muench was the recipient of the $500 Borden Award for the most meritorious undergraduate research. His research was done on the "Amino Acid Dependent Pyrophosphate-ATP Exchange in Human Leukemic and Rat Tissue" in the laboratory of Dr. William Harrington, associate professor of medicine. He also received the medical degree magna cum laude at commencement exercises making him the fourth student in the history of the medical school to receive the degree with this honor. A graduate of Princeton University, he began his internship in ward medicine at Barnes Hospital in July.

Dr. Hammond received the Alpha Omega Alpha Book Prize for having made the highest four-year academic average in his class; and a Medical Fund Society Prize for excellence in the study of internal medicine. At the end of his second year of medicine, Dr. Hammond received the Roche Award given to the student who best exemplifies the ideals of the modern American physician. He is an honor graduate of Indiana University and received the medical degree cum laude. In July, he began his internship year at Peter Bent Brigham Hospital, Boston.

Dr. Leonard A. Fahien, St. Louis awarded the Jacques J. Bronfenbrenner Memorial Award for the most outstanding work in infectious diseases.

Dr. Eric A. Pfeiffer, St. Louis, received the American Psychiatric Association award to the student presenting the outstanding senior dissertion on a psychiatric subject. His research was done on "Hypertension and Autonomic Habituation" under the supervision of Dr. George Winokur, associate professor of psychiatry.

The Sidney I. Schwab Book Prize for general excellence in psychiatry was awarded Dr. Eli R. Shuter, Spring Valley, N. Y.; Dr. Carolyn W. Terry, Louisville, Ky., received the honorable mention citation of the American Medical Women's Association presented to women who graduate in the upper ten per cent of their class.

Dr. Winston A. Tustison, St. Louis, Mo., was awarded the Missouri State Medical Association Annual Award of a United States Savings Bond to an honor graduate; and the Medical Fund Society Prize to the senior who has excelled in the study of surgery was awarded Dr. Joe R. Utley, Elk City, Okla.

C. V. Mosby Company Book Awards for high general scholastic standing and research achievement were awarded to Dr. Floyd E. Bloom, Dallas, Tex.; Dr. William S. Medart, Jr., St. Louis; Dr. Eugene J. Sayfie, Charleston, W. Va.; Dr. Joseph A. Sisson, San Diego, Calif. and Dr. Raymond D. Wochner, Tempe, Ariz. Drs. Bloom, Pfeiffer, Shuter, Sisson, Mrs. Terry, Tustison and Wochner received the medical degree cum laude as did B. Calvin Harmon, Fort Worth, Tex. Dr. Medart received the medical degree with special honors in the field of pathology and special honors in the field of physiology were awarded Dr. Martin L. Rubenberg, Brooklyn, N. Y. Candidates for degree with special honors were announced by Dean Edward W. Dempsey. Awards were made by Drs. Hugh Chaplin, Jr., Samuel B. Guze, Carl G. Harford, W. Stanley Hartroft, Carl V. Moore, Margaret G. Smith, and Henry G. Schwartz. Dr. Robert J. Glaser, Dean and Vice President for Medical Affairs, University of Colorado School of Medicine, gave the address.

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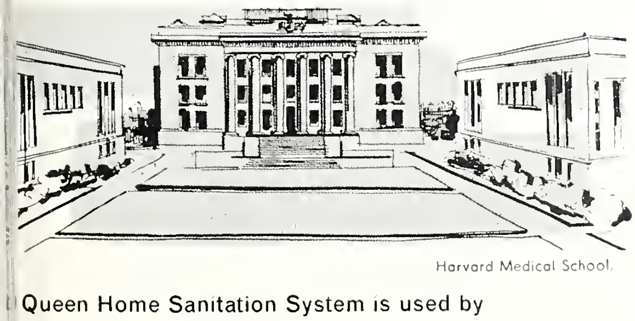

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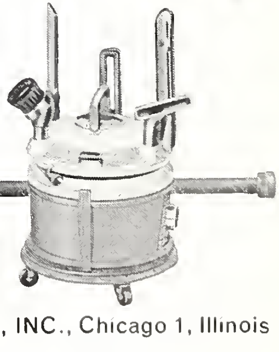

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MISSOURI ACADEMY

(Continued from page 988)

sion of those now in operation. He stressed the need for the team approach in meeting the health needs of the public in pointing out that medical schools must take the initiative in this team approach idea both in medical education programs for students and in cooperative endeavors with other groups interested in medical care and education.

During the day, while the doctors were learning more about medicine, the ladies were enjoying special designed activities just for them. The day's festivities began at 10:00 a.m. with the first scientific discussion and concluded at 5:30 p.m. with a reception for all present.

On Thursday evening, May 12, at the Golden Ox Restaurant in Kansas City, the Annual Spring Banquet of the Kansas City Chapter of the Missouri Academy of General Practice was held with more than 100 in attendance including doctors, their wives and guests. This banquet also serves as the election and installation of officers for the coming year. The main address of the evening was presented by Mr. Michael Newton, the British Consulate Information Officer of the eight states in the Kansas City area. He spoke on "Meet the British." In his talk much emphasis was placed upon the continued need of cooperative endeavors and like thinking of the British and American people concerning the handling of world problems. Mr. Newton is a Cambridge graduate and has taught history at the University of Michigan and at the University of Texas.

Each year on this occasion the Kansas City Academy presents a plaque to the "Doctor of the Year." This doctor is chosen from the chapter membership and the recipient on this occasion was Dr. Richard R. Becker, who has long served the Academy well.

Academy President-elect Leitch, immediate Past President of the MSMA and President-Elect Bowser of Jackson County Medical Society hold discussion.

The nominating committee's slate of officers for the coming year, as follows, was unanimously elected: President-Elect, Dr. I. C. Fowler; Secretary, Dr. Robert Butcher; Treasurer, Dr. Richard Owens; Director one year, Dr. Ed Samuelson; Director three years, Dr. Jack Stelmach; Director three years, Dr. W. C. Ganley. The last official duty of Dr. Harry K. Cohen, President of the Chapter, was to turn over the gavel to the new President, Dr. Frank A. O'Connell. This was done in proper form and following a few brief pertinent remarks by the new President, Dr. O'Connell, the meeting was adjourned.

It was interesting to note that President-Elect, Cecil Leitch of the Missouri Academy of General Practice, immediate Past President, Ralph Perry of the Missouri State Medical Association, and President-Elect, John F. Bowser, of Jackson County Medical Society, were present and found opportunity to get together for a short informal discussion of the problems and pleasures that always seem to go along with these particular offices.

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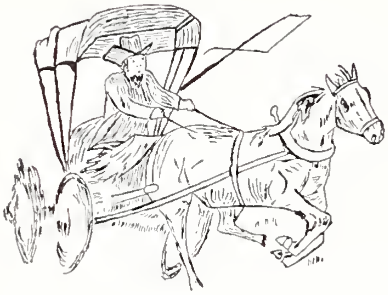
Missouri Medicine in Review



FORTY YEARS AGO

When Dr. Hanau W. Loeb organized the St. Louis Physicians' Gold Club a year ago and entertained the members at its first dinner, he undoubtedly increased the number of holidays in that city by one, at least for physicians.

Dr. Evarts A. Graham, professor of surgery in Washington University Medical School, St. Louis, is one of five American surgeons designated to read papers at the International Congress of Surgery held in Paris, July 19-23.

Dr. T. A. Coffelt of Springfield was elected president of the Mid-West Academy of Ophthalmology and Oto-Laryngology at the annual meeting of that society held in Wichita in June. Dr. Harold Bailey of Springfield was elected secretary-treasurer.

The Butler-Stoddard County Medical Society and the Chamber of Commerce at Poplar Bluff held a joint meeting on June 29 to arrange plans for advocating a bond issue of $100,000 for a county hospital.

The University of Maryland created a separate department of anesthesia several years ago and put Dr. S. Griffith Davis in charge with the title of associate professor. Having realized the importance of the work the university has made Dr. Davis professor in this department. So far as records are available, this is the first professorship of anesthesia to be created in the United States.

A new medical journal, *Annals of Medicine,* is to be published quarterly under the direction of the councilors of the American Congress on Internal Medicine, and the American College of Physicians as the official organ of these bodies. The first number has just appeared. It is edited by Dr. Frank Smithies.

Departing from its policy of designating government hospitals by number and camp location, the War Department has begun naming general hospitals in memory of deceased medical officers whose careers were marked by some distinguished service. In the list published recently in the *Journal of the American Medical Association,* one hospital is named in honor of Lt. William T. Fitzsimons, formerly of Kansas City, and another hospital is named in honor of Major William Beaumont, who pursued much of his investigative work on digestion while residing in St. Louis.

TWENTY-FIVE YEARS AGO

It is particularly gratifying to physicians of Kansas, but also a satisfaction of all physicians, that the federal district court upheld the Kansas Board of Medical Registration and Examination in its revocation of J. R. Brinkley's license to practice medicine. The board took its action several years ago and since that time Brinkley has operated, as the *Journal of the Kansas Medical Society* states, "on one or another of the banks of the Rio Grande."

TEN YEARS AGO

The 99th Annual Session of the American Medical Association held in San Francisco, June 26 to 30, proved to be an outstanding one. Although the San Francisco County Medical Society promised fog, little was seen. The weather was perfect throughout the meeting. The attendance was the largest in the history of the Association with the exception of the 1947 centennial session in Atlantic City. Missouri was signally honored by the selection of Evarts A. Graham, M.D., St. Louis, as the recipient of the Distinguished Service Award for 1950.

A plaque, hand carved by Peter V. Siegel, M.D., Smithton, was presented to the Missouri Academy of General Practice at the annual session held in Springfield on April 27.

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Kestler, O.: Conservative Management of "Low Back Syndrome", J.A.M.A. 172: 2039 (April 30) 1960.

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BOOK REVIEW

Hypertensive Disease, Diagnosis and Treatment, by Sibley W. Hoobler, M.D., Associate Professor of Internal Medicine, University of Michigan Medical School; Director of Hypertension Unit, University of Michigan Hospital. Hoeber-Harper Publishers, New York. 1959. Price $7.50.

This book is a manual summarizing the essentials in the management of hypertension. I believe it is a useful book, especially for the general practitioner. The internist or cardiologist may be disappointed in it. Its organization is desirable. It divides hypertension into secondary hypertension susceptible to cure and not susceptible to cure, and primary hypertension (essential hypertension). Then there are sections on principles of treatment and specific treatment. Finally there is an appendix of 60 pages discussing various author's individual plans of treatment.

In general the book is clearly and briefly written. There are a few errors such as on page 32, hyperkalemic alkalosis should be hypokalemic alkalosis. There is only a brief mention, with no details of the technic or interpretation, of the Howard test of differential renal function in diagnosis of unilateral renal ischemia. This test certainly deserves more than one fourth of a page. There are nine pages devoted to analysis of urinary catechol amines including details of the chemical method useful only to a chemist or laboratory technician. Also several of the appendices on specific methods of treatment might have been omitted. The author only devotes 11 pages to the entire subject of bilateral renal disease (two and one half pages to chronic glomerulonephritis, and two pages to chronic pyelonephritis). There is no mention at all of Sternheimer's staining method for glitter cells and their significance in pyelonephritis. A discussion of this test which can easily be performed in any practitioner's office seems desirable over the details of the chemical analysis of catechol amines which certainly has no place in the office laboratory.

However, I do like the arrangement and the emphasis that one must be on the alert for causes of secondary hypertension even if I am critical of the lack of balance in the amount of space devoted to various aspects of diagnosis and treatment of secondary hypertension. H. C. W.

BOOKS RECEIVED

On the Sociology of Medicine, by Henry E. Sigerist. Edited by Milton I. Roemer, M.D., Director of Research, Sloan Institute of Hospital Administration, Cornell University. Foreword by James M. Mackintosh, M.D., Formerly Dean, University of London School of Hygiene and Tropical Medicine; Director, Division of Education and Training Service, World Health Organization. MD Publications, Inc., New York, 1960. Price $6.75.

Anatomy, A Regional Study of Human Structure, by Ernest Gardner, M.D., Wayne State University; Donald J. Gray, Ph.D., Stanford University; and Ronan O'Rahilly, M.Sc., M.D., Wayne State University. The W. B. Saunders Company, Philadelphia, London, 1960. Price $15.00.

Your Heart: A Handbook for Laymen, by H. M. Marvin, M.D., Associate Clinical Professor of Medicine, Yale University School of Medicine; Past President, American Heart Association. Doubleday & Company, Inc., Garden City, New York, 1960. Price $4.50.

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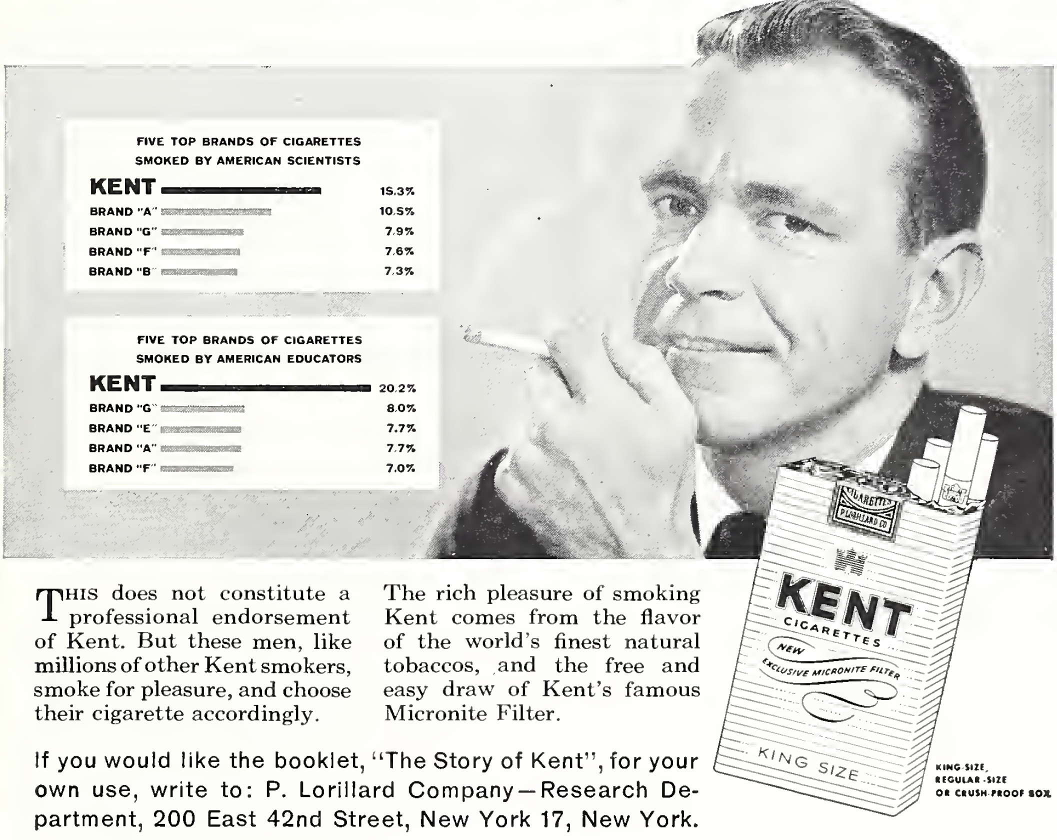
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Drugs of Choice 1960-1961, Walter Modell, M.D., Editor, Director, Clinical Pharmacology, and Associate Professor of Pharmacology, Cornell University Medical College; Attending Physician, New York Veterans Administration Hospital; Associate Visiting Physician, Bellevue Hospital; Member, Poison Control Advisory Board of New York City; Member, Revision Committee, United States Pharmacopeia XVI; Editor, Clinical Pharmacology and Therapeutics. The C. V. Mosby Company, St. Louis, 1960. Price $13.50.

A Practical Guide for General Surgical Management, by Julian A. Sterling, M.D., Diplomate, American Board of Surgery; Assistant Professor of Surgery, Graduate School of Medicine, University of Pennsylvania; Senior Attending Surgeon, Albert Einstein Medical Center; Chief Surgeon Psychiatric Hospital, Philadelphia. Foreword by Herbert R. Hawthorne, M.D. Vantage Press, New York, Washington, Hollywood, 1959. Price $3.00.

Principles of Public Health Administration, by John J. Hanlon, M.D., Director of Public Health Services, City of Philadelphia, and Professor and Head, Department of Preventive Medicine and Public Health, Temple University School of Medicine, Philadelphia, Pa. Third Edition. The C. V. Mosby Company, St. Louis, 1960. Price $10.50.

Christopher's Minor Surgery, Edited by Alton Ochsner, M.D., Professor of Clinical Surgery, Tulane University School of Medicine; and Michael E. DeBakey, M.D., Professor of Surgery and Chairman of the Department of Surgery, Baylor University College of Medicine. Eighth Edition. W. B. Saunders Company, Philadelphia & London, 1959. Price $10.50.

Textbook of Otolaryngology, by David D. DeWeese, M.D., Clinical Professor of Otolaryngology, University of Oregon Medical School, Portland, Oregon; and William H. Saunders, M.D., Associate Professor of Otolaryngology, The Ohio State University College of Medicine, Columbus, Ohio. The C. V. Mosby Company, St. Louis, 1960. Price $8.75.

Ciba Foundation Study Group No. 3, Cancer of the Cervix: Diagnosis of Early Forms, in honour of Prof. Dr. C. Kaufmann. Editors for the Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P., and Maeve O'Connor, B.A. Little, Brown and Company, Boston, 1959. Price $2.50.

Christopher's Textbook of Surgery, Edited by Loyal Davis, M.D., Chairman of the Department of Surgery, Northwestern University Medical School. Seventh Edition. W. B. Saunders Company, Philadelphia & London, 1960. Price $17.00.

A Doctor Enjoys Sherlock Holmes, by Edward J. Van Liere. Vantage Press, New York, Washington, Hollywood, 1959. Price $3.00.

The Reluctant Surgeon: A Biography of John Hunter, by John Kobler. Doubleday & Company, Inc., Garden City, New York, 1960. Price $4.95.

The Teen-Age Years: A Medical Guide for Young People and Their Parents, by Arthur Roth, M.D. Doubleday & Company, Inc., Garden City, New York, 1960. Price $3.95.

Medieval and Renaissance Medicine, by Benjamin Lee Gordon, M.D. Philosophical Library, New York, 1959. Price $10.00.

The Cigarette Habit: A Scientific Cure, by Arthur King. Doubleday & Company, Inc., Garden City, New York, 1959. Price $2.00.

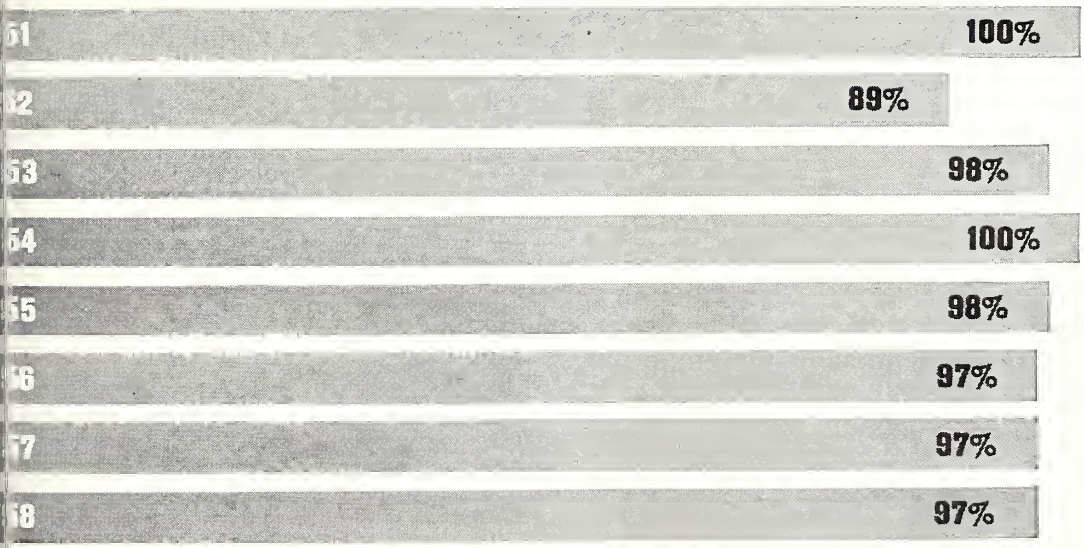
The Story of Dissection, by Jack Kevorkian, M.D. Philosophical Library, Inc., New York, 1959. Price $3,75.

Schifferes' Family Medical Encyclopedia, by Justus J. Schifferes, Ph.D. Third Edition. Permabooks, New York, 1959. Price 50 cents.

Smoking and Health, by Alton Ochsner, M.D. Second Edition. Julian Messner, Inc., New York, 1959. Price $3.00.

Pardon My Sneeze, the Story of Allergy, by Milton Millman, M.D., Fellow, American College of Allergists; Member, American Academy of Allergy, Past President, San Diego Biomedical Research Institute. Frye & Smith Ltd., San Diego, Calif., 1960. Price $4.00.

SENSITIVITY OF PYOGENIC STRAINS OF STAPHYLOCOCCI TO CHLOROMYCETIN OVER A PERIOD OF EIGHT YEARS*



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Curiosa et Trivia

WILLIAM B. McCUNNIFF

Henry VIII, at the age of 25, developed a leg ulcer, which plagued him the rest of his life. His doctors were unable to cure the ulcer . . . thanks to his continued physical activity, not to mention, syphilis. He then developed his own "King's Plaster," an ingredient of which was ground pearls. This "remedy" not only failed to cure his own ulcer, but also that of his friend, Will Comptom.

Anybody on the scrub football team could have told them! Recent studies in deceleration at Colorado University have shown that momentary forces of 50 G's are exerted at the moment of impact of opposing football players.

Before most of us are even half way conversant with Einthoven's string galvanometer, it is reported that fetal electrocardiographs with 1,000 times greater sensitivity than present models, are diagnosing congenital heart defects in 20 week pregnancies.

Capsule Clinics

- There is no significant difference in the recurrence rate of active carditis among rheumatic fever patients receiving continuous oral prophylaxis with penicillin and those in intermittent penicillin therapy during respiratory illness. Lim, W. N., and Wilson, M. G., New England J. M. **262**:321, 1960.
- The body-build of homosexuals is not specifically related to their sexual abnormality. Copper, A. J., British M. J. **2**:1443, 1959.
- The danger of placing tuberculous children among other hospitalized youngsters arises not from the child as a patient but from infected adults who may visit the child. Dickie, A. W., and Crerry, R. D. G., British M. J. **2**:1435, 1959.
- Venereal disease is on the march. In 1958, 22 states reported increases in gonorrhea and syphilis among the 15 to 19 year age group, and 12 states reported increases among the 10 to 14 year age group. Clark, E. J. G., Lancet **80**:1, 1960.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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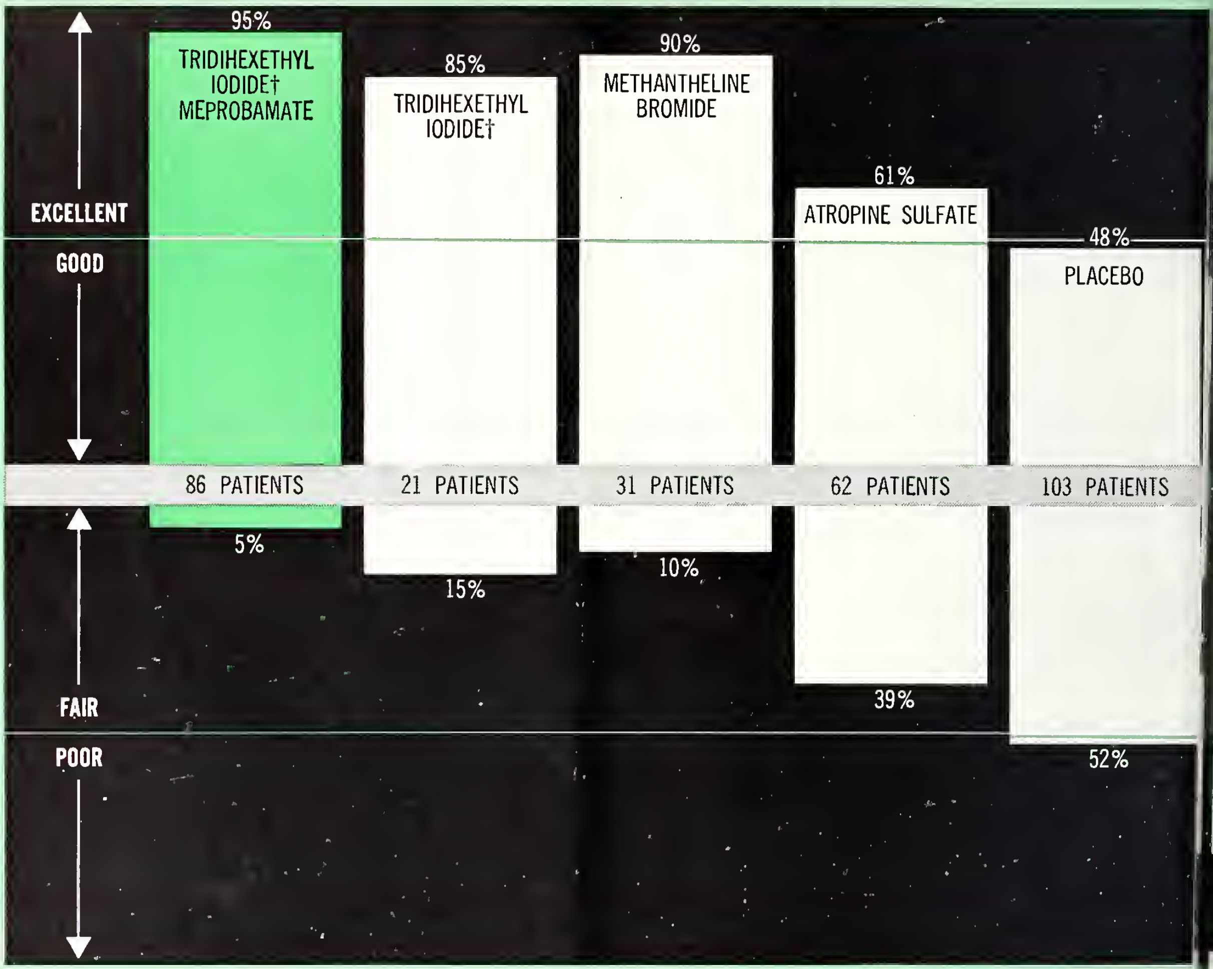

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DROWSINESS	20%	0%	0%	0%	0%
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OPERATION	0%	5%	5%	14%	2%
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water, J. S., and Carson, J. M.: Therapeutic Principles in Management of Peptic Ulcer. Am. J. Digest. Dis. 4:1055 (Dec.) 1959.

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WASHINGTON

CONGRESS RECONVENED

The United States Senate reconvened on August 8 and the House of Representatives on August 15, about the time this issue of MISSOURI MEDICINE is closed and making impossible a report on actions by the Congress. Hope has been expressed that adjournment may be by Labor Day.

H. R. 10

Shortly before the recess of Congress, Senator Harry F. Byrd informed the Senate that he favored and will vote for the passage of the Keogh bill in the form in which it was amended by the Finance Committee. Debate on this bill which would encourage establishment of voluntary pension plans with income tax benefits was to be resumed when Congress reconvened.

MEDICARE

Col. W. D. Graham has been appointed the professional director of the Office for Dependents' Medical Care, taking the place of Col. Norman E. Peatfield. Colonel Graham will be chief liaison officer between Medicare's headquarters and the professional societies and state medical associations interested in the program's operation.

PLATFORMS

The Democratic National Convention platform adopted in early July, contained a plank advocating use of the Social Security System to provide hospitalization and medical services for the aged.

The platform also proposed appropriations from the general revenue to provide corresponding health benefits for the elderly not covered by social security. No program was given in detail nor were any of the several health care for the aged bills pending in Congress supported specifically. However, Kennedy is the sponsor of a Forand-type bill to bring financing of health care for the aged under the Social Security System and he is running on a social security health plank.

Senate Majority Leader Lyndon B. Johnson of Texas, candidate for the Vice Presidency, is quoted as saying that he would support the convention platform.

The Republican Platform Committee, and the Convention, endorsed a medical aid for the aged plan embracing both private and state participation. Private insurance would be for those able and wishing to contribute, and government aid would be provided for those unable to carry the insurance or pay for medical care.

The platform is the choice of Vice President Nixon as he had endorsed an Eisenhower administration plan which would provide federal aid to states to help the needy pay for medical assistance. Governor Rockefeller had desired a plan under which medical assistance would be financed by social security taxes.

Mr. Nixon is quoted as saying that the proposal would encourage commercial carriers and voluntary insurance organizations to continue their efforts to develop coverage plans for the aged.

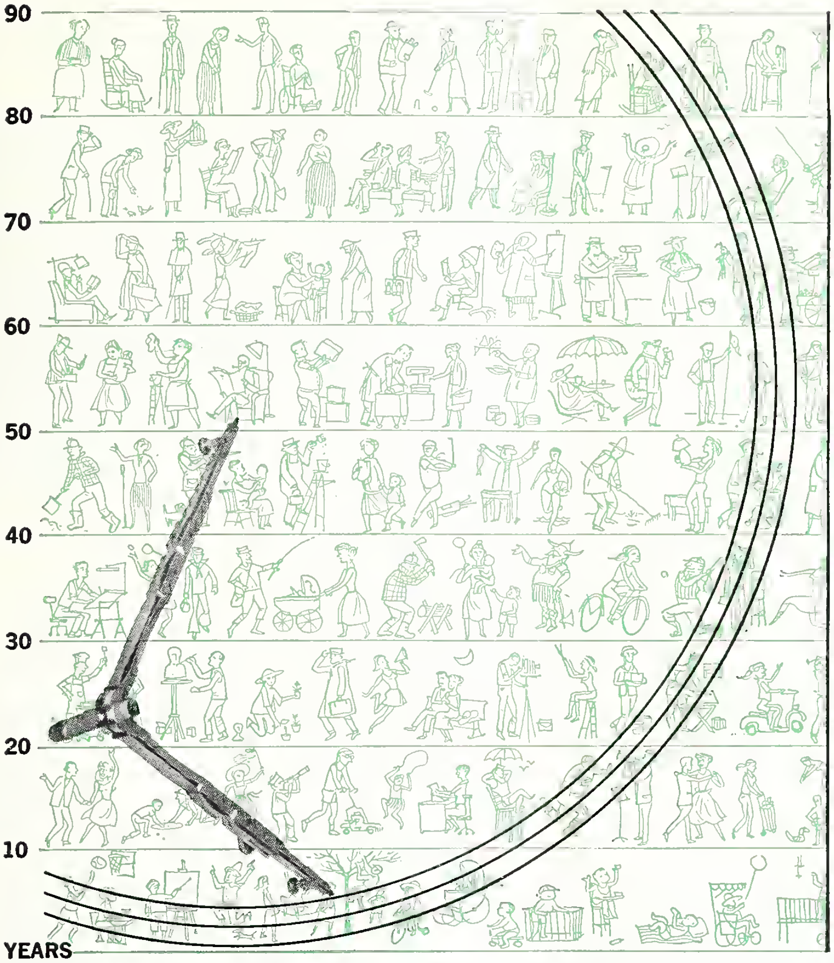
BILLS IN CONGRESS

The situation at the reconvening of Congress was that the omnibus social security bill was approved by the House Ways and Means Committee and cleared the House by a vote of 381 to 23. It was sent to the Senate Finance Committee which held two days of hearings and a vote by the Finance Committee was expected soon after Congress reconvened. The measure contained a voluntary, federal-state program for assisting needy aged persons meet their health care costs. Both the Administration and the American Medical Association endorsed the House measure as in keeping with the concepts of giving the states prime responsibility for helping their citizens, for aiding those who are most in need of help, and for avoiding the compulsory aspects of health plans involving the social security mechanism.

However, proponents of Forand-type legislation promised a determined fight on the floor of the Senate.

In the event Congress should approve a government medicine plan, opponents were counting on a Presidential veto to kill the measure. The Chief Executive repeatedly has asserted his all-out opposition to any compulsory plan for health care financing.

At the Senate Finance Committee hearing, prior to adjournment for the conventions, Arthur S. Flemming, Secretary of Health, Education and Welfare, renewed the Administration's flat stand against the social security avenue to financing health costs. Such a plan, he said, would inevitably lead to pressures for expanding the benefits and lowering or eliminating the age requirement. He estimated that under such circumstances, a 15 to 20 per cent social security payroll tax would not be too far off.



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Across Missouri

LICENSEES

Four hundred fifty-eight physicians were granted licenses in the State of Missouri following examinations given by the State Board of Registration for the Healing Arts in July. There were 253 medical physicians and 205 osteopathic physicians. All applicants had taken examinations in five medical or osteopathic schools in the state last May.

SENIOR CITIZENS

Many facts about the state's senior citizens were brought out at the meeting of the Missouri Committee for the 1961 White House Conference on Aging which was held in Columbia in July, among them that 470,000 Missourians, 11 per cent of the population, have attained the age of 65. Many still work or have provided for themselves, but it is reported that 115,000 depend on public assistance laws to provide for their basic needs.

ALL ELECTRIC HOSPITAL

In a recent issue of *The Powerlite*, publication of the Kansas City Power & Light Company, an article, quoted in part, appeared.

"The first all-electric hospital in the Mid-West opened this month at Waverly, Missouri, a monument to a progressive, forward-looking physician who practiced in the community for more than a half century.

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JOHN F. PEARL, M.D.

Missouri Academy of General Practice

On Saturday and Sunday, November 5-6, 1960, at the Chase Hotel, in St. Louis, the Missouri Academy of General Practice offers one of the finest programs, specifically tailored for the general practitioner, that has ever been offered in this state.

The Program Committee of the Academy, under the Chairmanship of Dr. Doyle McCraw, of Bolivar, has selected a group of speakers who are recognized as top men in their respective fields. We believe that as you look over the following names of these excellent teachers, scheduled on the two day program, you will immediately start making plans for attending this entire session. The speakers will appear under the heading of four symposia as follows:

Symposium on Neurology and Psychiatry, Saturday morning, November 5: Kenneth Appel, M.D., Philadelphia, Professor of Psychiatry and Chairman of the Department at the University of Pennsylvania Medical School; Walter L. Moore, M.D., St. Louis, Assistant Professor of Clinical Neurology and Psychiatry, St. Louis University School of Medicine; Robert J. Mueller, M.D., St. Louis, Instructor in Neuro-Psychiatry, Washington University School of Medicine.

Symposium on Medicine, Saturday afternoon, November 5: E. H. Rynearson, M.D., Rochester, Chairman of Section of Metabolic Diseases, Mayo Clinic; William A. Knight, Jr., M.D., St. Louis, Associate Professor of Internal Medicine, St. Louis University School of Medicine; Robert A. Schneider, M.D., Oklahoma City, Associate Professor of Medicine and of Psychiatry, Neurology, and Behavior Sciences, University of Oklahoma School of Medicine.

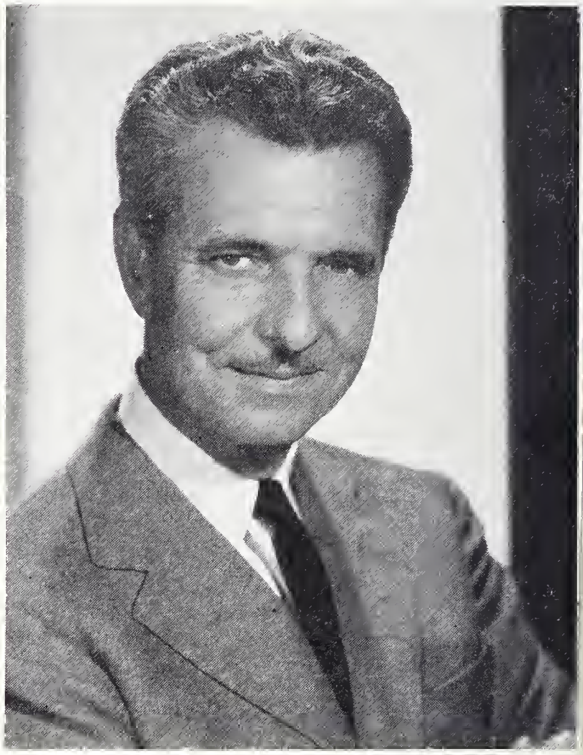
General Scientific Session, Sunday morning, November 6: L. R. Sante, M.D., St. Louis, Professor and Director of Department of Radiology, St. Louis University School of Medicine; Elmer Hess, M.D., Erie, Pennsylvania, Urologist, and Past President of the A.M.A.; John A. Buesseler, M.D., Columbia, Associate Professor and Chief of Ophthalmology, University of Missouri School of Medicine; T. E. Walsh, M.D., St. Louis, Professor of Otolaryngology and Head of the Department, Washington University School of Medicine; Vernon E. Wilson, M.D., Columbia, Dean, University of Missouri School of Medicine.

Symposium on Surgery, Sunday afternoon, November 6: C. W. Mayo, M.D., Rochester, Surgeon to Mayo Clinic; Kenneth K. Keown, M.D., Columbia, Professor and Chairman, Department of Anesthesiology, University of Missouri School of Medicine; Brown M. Dobyns, M.D., Cleveland, Professor of Surgery, Western Reserve University School of Medicine; Eugene M. Bricker, M.D., St. Louis, Associate Professor of Clinical Surgery, Washington University School of Medicine.

At the close of each symposium, a 45 minute panel discussion by the speakers on questions from the audience will add spice to this attractive menu. The entire program including the specific subjects to be discussed by each speaker will appear on this page in the October issue of MISSOURI MEDICINE. Look for it—won't you, and we will wager your interest will be additionally kindled.

An unusual treat is in store for all of those who

(Continued on page 1172)



Mr. Lauck, who will be the banquet speaker.

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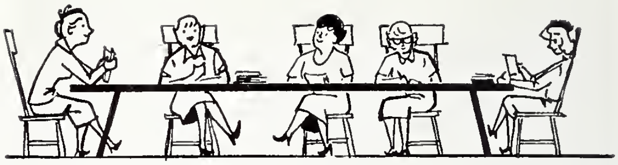
Woman's Auxiliary



The proportion of physicians to population in this country is approximately one to 1,000. There are about half as many members of the Woman's Auxiliary to the American Medical Association as there are members of the A.M.A. We like to think that the 270 thousand members of the A.M.A. and its Auxiliary are taking a lively interest in informing themselves about the conditions that could, if allowed to exist, remove the rights of physicians to follow their profession without governmental interference and control. We like to think that this informed membership is working to keep this condition from ever coming to pass.

But how can a group so small have any influence when drastically outnumbered by the rest of the population? Wherein lies their strength? Certainly, their strength is not in numbers.

Their strength lies in their ideals and principles, and in the sincere and unswerving belief that what is good for the Medical Profession is also good for the entire nation. It is difficult to picture a man or woman who is willing to make the sacrifices needed to become a Doctor of Medicine who does not have a deep concern for his fellow man. It is hard to picture a man who so sacrifices himself to the needs of his suffering patients who could be so selfish as to urge legislation which would benefit him alone, at the expense of the rest of the American people.

Believing this soundly, the thing to do is to go to work. Although the pun is condemned as the lowest form of humor, let us, nevertheless, take the meanings of the word "Interest." (Perhaps we can be excused for this punning, for we intend to be anything but funny in using it.) Among the multiple meanings of the word "interest" are: "a share in participation of something"; "a feeling of concern, intentness or curiosity about something"; "profit, welfare, benefit."

Suppose each of our 270,000 sets out to interest and inform ten people in his sphere of influence. We shall leave it to you to select the definitions of the word "interest" that apply, and shall propose that we multiply the interest of the 270,000 people in or associated with the medical profession by ten. Now, we have over two and a half million. What a vast difference one zero can make! If each of the ten persons on our list has been sufficiently convinced, it is possible that he, in his turn, may convince another ten; and so, on and on. Can you visualize the amount of interest that can accrue by our own seemingly small investment of our interest and concern?

But, enough of mathematics! A few weeks after you have read this we shall be journeying to Jefferson City for our annual Fall Executive Board Meeting at the Hotel Governor on September 20-21. Perhaps you can convince your doctor that he should take a little break in routine and come along to Jefferson City with you. The Cole County Doctors will arrange golf for him, if he is a golfer. If he loves to fish, well, the Lake of the Ozarks is close at hand, and a day of fishing would do him a world of good. He is sure to enjoy the banquet on Tuesday night, September 20, held in the Ball Room at the Hotel Governor.

We are always surprised to find that, sometimes, just two days away from routine can be as refreshing as two weeks. Tell him how welcome he will be, and exert all your powers of persuasion to having him come with you.

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EARL J. WIPFLER, JR., M.D., *and*
HUGH E. STEPHENSON, JR., M.D., *Columbia*

Some Experiences With Mediastinal Tumors

Although a greater number of mediastinal tumors are being discovered by routine radiologic examination, they are relatively rare lesions in a physician's experience. When encountered, they may present problems relating to diagnosis, treatment and recommendations to patients who are asymptomatic.

Eleven mediastinal tumors have been resected at the University of Missouri Medical Center from September 1956, when the hospital opened, to January 1960. The salient features of this small, but unusual, series are presented, preceded by a brief review of the subject of mediastinal tumors. Early exploration and resection of the tumor, unless proven to be metastatic or lymphomatous, is stressed, which is the sine qua non principle of management.

Classification

The mediastinum, enclosed laterally by the pleural cavities, is bounded anteriorly by the sternum, posteriorly by the vertebral column, superiorly by the thoracic outlet, and inferiorly by the diaphram. Tumors of the mediastinum are commonly classified as to their position in the mediastinum relative to a median plane, as well as according to histologic type. One of the more common methods of plotting lesions is to divide the mediastinum into superior, anterior, middle and posterior divisions. The superior mediastinum lies above a horizontal plane through the sternal angle of Lewis, with the inferior mediastinum further divided as follows: (a) anterior mediastinum lying between the anterior surface of the pericardium and the sternum; (b) posterior mediastinum situated between the posterior surface of the pericardium and the paravertebral gutters, and (c) middle mediastinum being the interposed area.

Mediastinal tumors are relatively rare although more are being discovered by routine radiologic examination. Eleven mediastinal tumors have been resected at the University of Missouri Medical Center and these are reported, together with review of the subject.

Dr. Wipfler is Assistant Instructor in Surgery, and Dr. Stephenson is Professor and Chairman of the Department of Surgery, University of Missouri School of Medicine.

The most common tumors of the mediastinum are enlarged lymph nodes secondary to malignancy or granulomatous inflammatory disease. This presentation is concerned with primary lesions. The most common of these are neurogenic tumors, followed by the teratoid group, made up of teratomas and dermoid cysts. Clues as to their correct identity may be obtained by determining their position on a lateral chest x-ray.

TABLE 1

ANATOMICAL CLASSIFICATION OF PRIMARY MEDIASTINAL TUMORS

Anterior Mediastinum

TERATOID TUMORS
THYMIC TUMORS AND CYSTS
goiter
pericardial cysts
parathyroid adenomas
bronchogenic cysts
lymphoma
mesenchymal tumors

Middle Mediastinum

LYMPHOMA
bronchogenic cysts
pericardial cysts

Posterior Mediastinum

NEUROGENIC TUMORS
gastroenteric cysts
goiter
mesenchymal tumors
meningocele
esophageal tumors

Superior Mediastinum

GOITER
aneurysm
bronchogenic cysts
lymphoma
parathyroid adenomas
myxoma

Tables 1 and 2 list mediastinal tumors as to their anatomic and histoligic classifications.

Diagnosis

The signs and symptoms of a mediastinal tumor may be extremely variable, and often nonexistent. The common or general symptoms are due to mediastinal compression. Chest pain may be dull, aching, sharp or boring, with tumors of the anterior mediastinum more apt to cause pain. Impingement on the tracheobronchial tree or irritation of the pleura produces an irritative cough. Dyspnea and cyanosis usually occur later. Signs of sepsis are seen with infection in a cyst, a degenerating tumor or atelectasis due to bronchial obstruction. Visible swelling over the chest or in the suprasternal region, asymmetry of the chest, and percussion and auscultation changes of a widened mediastinum are found occasionally.

TABLE 2

HISTOLOGICAL CLASSIFICATION OF PRIMARY MEDIASTINAL TUMORS[1]

1. Neurogenic Tumors
2. Teratoid Tumors
3. Thymic Tumors
4. Mesenchymal Tumors
   a) fibroma and fibrosarcoma
   b) myxoma
   c) lipoma and liposarcoma
   d) hemangioma
   e) leiomyoma
   f) rhabdomyosarcoma
5. Cysts
   a) bronchogenic
   b) pericardial
   c) thymic
   d) enteric
6. Lymphoblastomas
7. Granulomas
8. Tumors of displaced tissues
   a) goiter
   b) parathyroid adenoma
   c) intrathoracic meningocele

Of more localizing value, are:

(a) Superior vena caval syndrome, almost invariably indicating malignancy (experience at the Medical Center previously reported[2]).
(b) Inequality of the pupils or Horner's syndrome.
(c) Hoarseness due to recurrent laryngeal palsy.
(d) Spinal cord signs and symptoms due to a neurogenic dumbell tumor.
(e) Dysphagia due to esophageal pressure.
(f) Intercostal nerve neuralgia or herpes.

Specific signs and symptoms are less common. These include:

(a) Weakness, dysphagia and other features of myasthenia gravis, which occurs in approximately 75 per cent of thymoma cases.[3]
(b) Association of cervical thyroid enlargement or a thyroidectomy scar with substernal goiter.
(c) Expectoration of hair due to a teratoid tumor eroding into the tracheobronchial tree.
(d) Hyperparathyroidism associated with a mediastinal parathyroid adenoma.
(e) Tracheal tug due to an aortic aneurysm.

In addition to the superior vena caval syndrome, other strong indications of malignancy are (a) weight loss in absence of infection, (b) evidence of rapid growth of the tumor, (c) pleural effusion, (d) nerve paralysis, especially phrenic or recurrent laryngeal, and (e) marked constitutional symptoms.

Radiologic examination of the chest is the chief means of establishing the presence of a mediastinal mass and clues as to the type of tumor. Special roentgenographic studies, as Bucky and oblique views, and laminography aid in evaluating the contour, shape, size, location and consistency of the tumor. Barium swallow and fluoroscopy may aid in determining pulsation and changes with respiration, swallowing and altering body position. Angiocardiography may be useful in suspected aneurysms and cardiovascular lesions. A therapeutic trial of roentgen treatment used to determine the response of a mass thought to be a lymphoma is considered by most authorities to be no longer sound, resulting in delay and adding to technical difficulties encountered at surgery.

Bronchoscopy, bronchography and esophagoscopy may be helpful in identifying and differentiating between intraluminal and extraluminal disease. Supraclavicular and scalene node biopsy often will establish the presence of metastatic disease. Diagnostic pneumothorax, with or without thoracoscopy, may be of value. Aspiration biopsy may be of limited use in lesions near the chest wall, as a pericardial cyst, but is thought to be contraindicated by many authors. Hematologic examinations may reveal changes of leukemia or eosinophilia accompanying a paracitic cyst. A positive intradermal test of Casoni[4] is considered virtually diagnostic of the presence of echinococci infestation, one form of which may be a mediastinal cyst. I^{131} tracer studies are useful to substantiate the identity of a substernal goiter, if functionally active. In the majority of cases, however, exploration with excision or biopsy is mandatory for correct diagnosis, and should be carried out without undue delay due to diagnostic procedues.

SERIES OF CASES

A small series of eleven cases of mediastinal tumors represents each of the four anatomic divisions of the mediastinum and an unusual histologic distribution. The tumors and their locations are as follows: goiter, five, anterior-superior mediastinum; parathyroid adenoma, two, anterior; neurogenic (neurofibroma, neurilemoma), two, posterior; dermoid cyst, one, middle, and bronchogenic cyst, one, superior, for a total of 11.

CASE REPORTS

Case 1. A. W., a 61 year old negro female, was admitted for evaluation of leiomyomata of the uterus. Routine chest films revealed an anterior-superior mediastinal mass (fig. 1a, b), although the patient was asymptomatic and no abnormality of the neck was detected. The anterior mediastinum was explored through a median sternotomy and a 3.5 by 6 by 8 cm., 100 gram encapsulated goiter was excised.

Case 2. H. I., a 37 year old white female, was admitted for evaluation of leiomyomata of the uterus. A routine chest x-ray demonstrated an anterior-superior mediastinal mass (fig. 2a, b). While awaiting surgery, a paroxysmal brassy cough was detected for the first time with no other pertinent symptoms or physical findings. A radioactive iodine scanogram was within normal limits. Utilizing a median sternotomy incision, an 8 cm. diameter, 95 gram encapsulated goiter was removed.

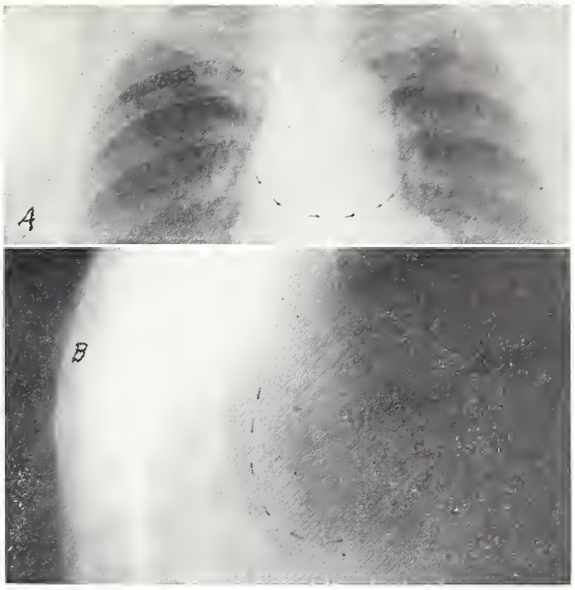


Fig. 1a, b. Chest films demonstrating substernal goiter in case 1.

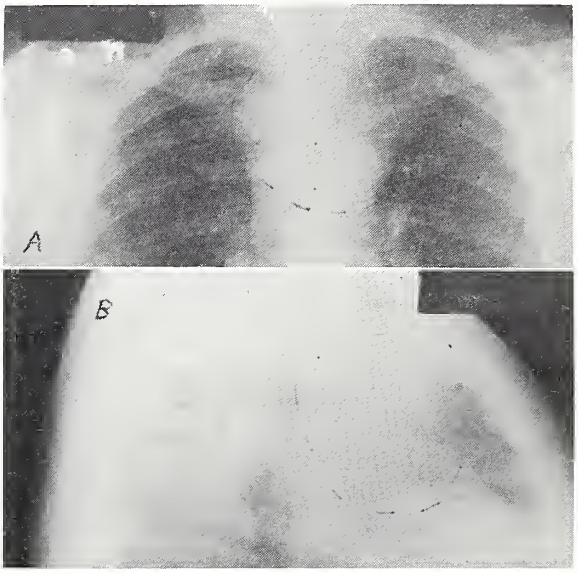


Fig. 2a, b. Substernal goiter in case 2. I^{131} scanogram unremarkable.

Case 3. C. P., a 65 year old white female, was admitted for evaluation of a substernal mass (fig. 3), having had a goiter removed 37 years previously. For the last five years, she had noted a slight swelling over the left anterior neck. Physical examination demonstrated the left lobe of the thyroid to be slightly enlarged. A left nodular, nontoxic goiter, with a large substernal component was excised through a collar incision.

Case 4. E. W., a 73 year old white female, entered the hospital ten days following an acute onset of

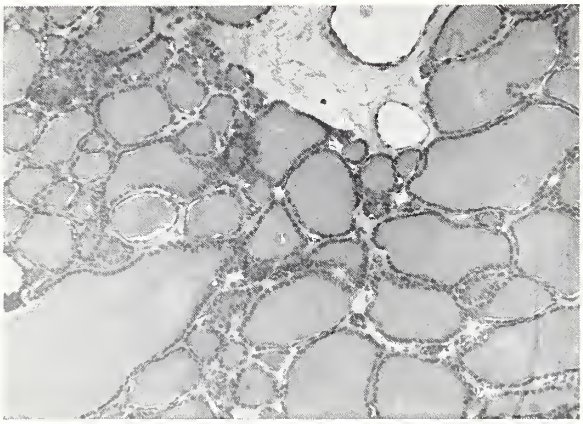


Fig. 3. Microscopic appearance of a nontoxic, nodular, substernal goiter, case 3. 140 x 1.43.

a violent coughing spell. A chest x-ray revealed a superior mediastinal mass (fig. 4a, b). On physical examination, the trachea was deviated to the right, with moderate symmetrical enlargement of the thyroid gland. A radioactive iodine scanogram strongly supported the diagnosis of substernal thyroid. A 4 by 6 by 9 cm., 195 gram, soft, multicystic, nontoxic nodular goiter was removed through a collar incision. Postoperatively, the patient developed a transient wound infection.

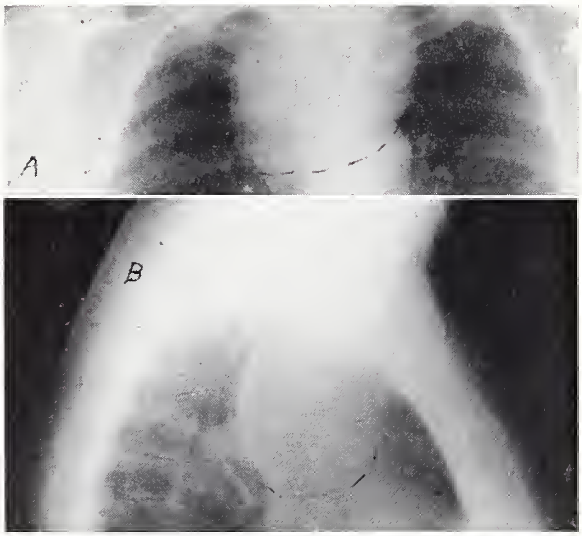


Fig. 4a, b. Substernal goiter, case 4, removed through a collar incision.

Case 5. I. R., a 76 year old white female, was admitted because of the findings of a superior mediastinal tumor on chest x-ray (fig. 5a, b), performed 10 days prior to hospital entry because of a mild attack of wheezing. She complained of having to constantly clear her throat and of voice change for the previous seven years. Physical examination revealed the trachea to be shifted markedly to the right, with slight stridor being present. Radioactive iodine scanogram interpretation was compatible with a substernal thyroid. At time of surgery, it was elected to remove a 12 by 6 by 6.5 cm., 308 gram nontoxic nodular goiter (fig. 6), through a median sternotomy extention of a collar incision. Following surgery, there was striking relief of the respiratory symptoms.

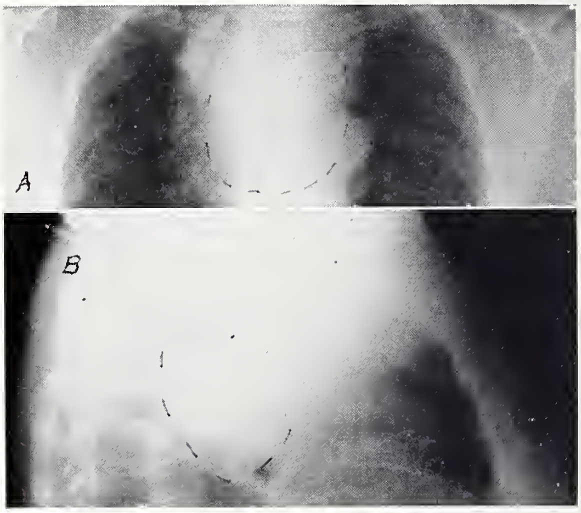


Fig. 5a, b. Case 5, a 308 gram substernal goiter.

Case 6. G. B., a 29 year old negro female, entered the hospital complaining of a low back pain of six weeks duration following trauma. Classical x-ray (fig. 7a, b) and laboratory findings of hyperparathyroidism resulted in exploration of the parathyroid glands. Three and one half of the four identified cervical glands were excised, with two of the glands showing hyperplasia. A month later, after laboratory tests revealed persistence of marked hyperparathyroidism, the anterior mediastinum was explored through a median sternotomy. A parathyroid ade-

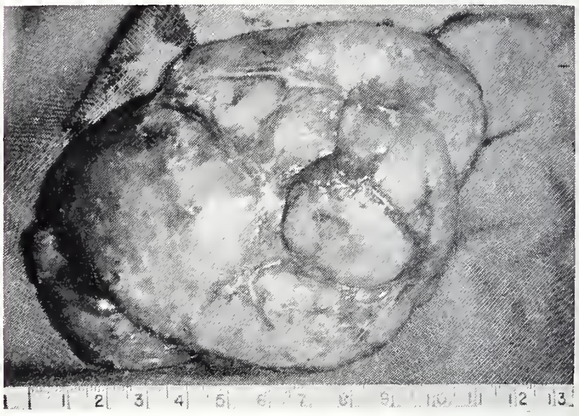


Fig. 6. Appearance of gross specimen, case 5, immediately following resection.

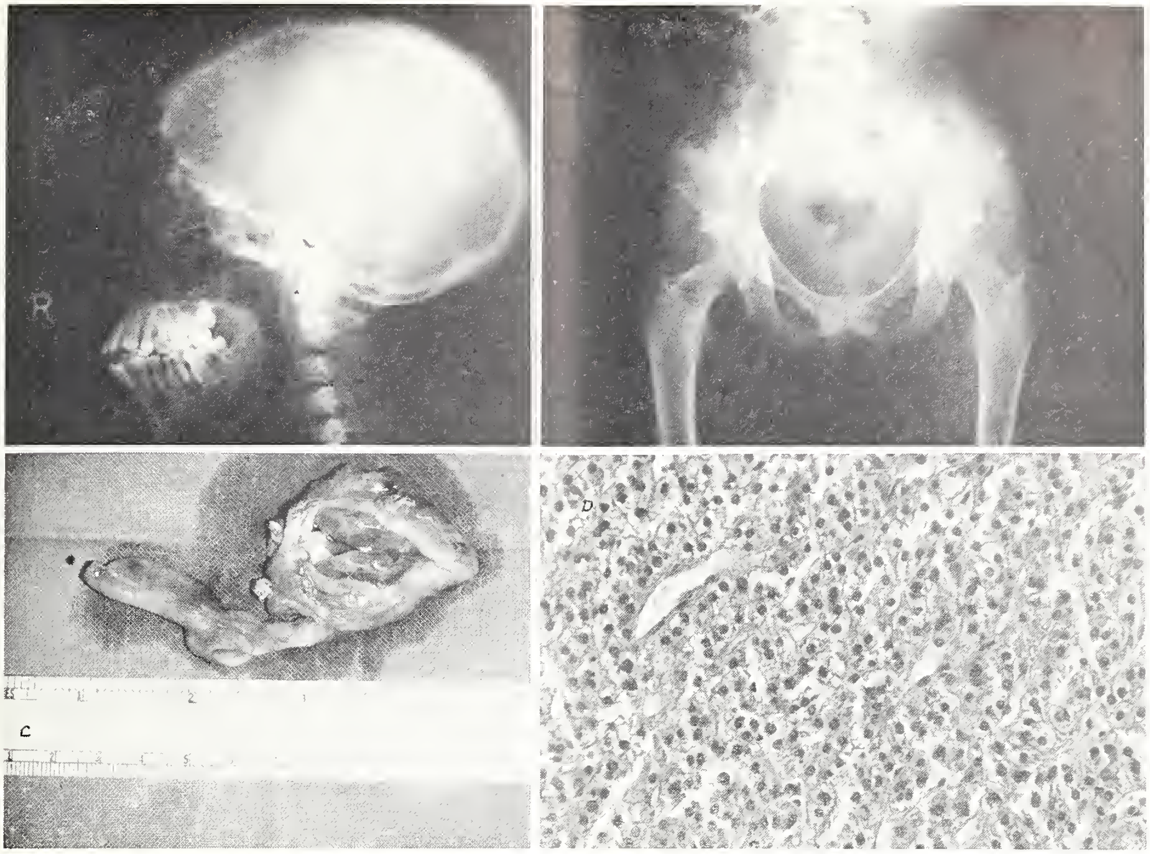


Fig. 7a, b. Typical x-ray changes of hyperparathyroidism. Note granular appearance to the skull and multiple cystic destructive changes of the pelvis. c. Parathyroid adenoma within the substance of the thymus gland, case 6, immediately following excision. d. Microscopic appearance of parathyroid adenoma, case 6. 350 x 1.43.

noma, measuring 2 by 2 by 1.5 cm. (fig. 7c, d) was found in the substance of the thymus gland, and was resected, with prompt reversal of the hyperparathyroidism postoperatively.

Case 7. H. S., a 42 year old white female, was admitted because of spontaneous fracture of both femurs, having had spontaneous fractures of the left clavicle and right radius three years previously. The patient had had evidence of neurofibromatosis since birth, and was seen with multiple neurofibromas, in addition to a markedy deformed thorax and extremities. X-ray (fig. 8a, 9) and laboratory findings were those of marked, advanced hyperparathyroidism. When exploration of the parathyroid glands failed to reveal abnormality, finger exploration of the superior mediastinum revealed a mass superior to the right atrium and anterior to the left innominate vein, which, when excised with the aid of a spoon, proved to be a 2 by 2 by 3.8 cm., 16 gram parathyroid adenoma (fig. 10). Postoperatively, there was immediate laboratory evidence of regression of hyperparathyroidism and follow-up x-rays demonstrated progressive increase in mineralization of bones and healing of the femoral fractures (fig. 8b).

Case 8. H. S., a 51 year old white female with neurofibromatosis, was first seen two and one half years previously with a posterior mediastinal mass, at which time she refused surgery. Because of progressive chest pain and dyspnea beginning three months prior to this admission, she consented to

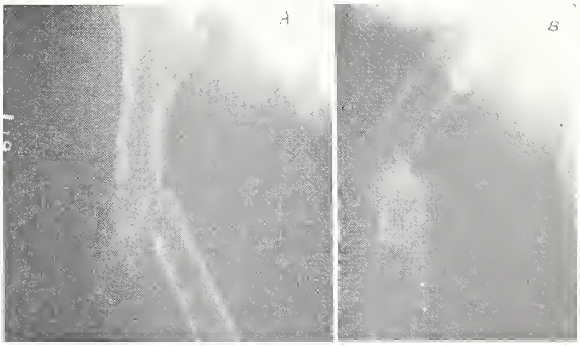


Fig. 8a. Pathologic fracture of right femur due to advanced hyperparathyroidism. Note diffuse cystic changes. Case 7. b. Healing pathologic fracture of right femur, seven months following excision of parathyroid adenoma.

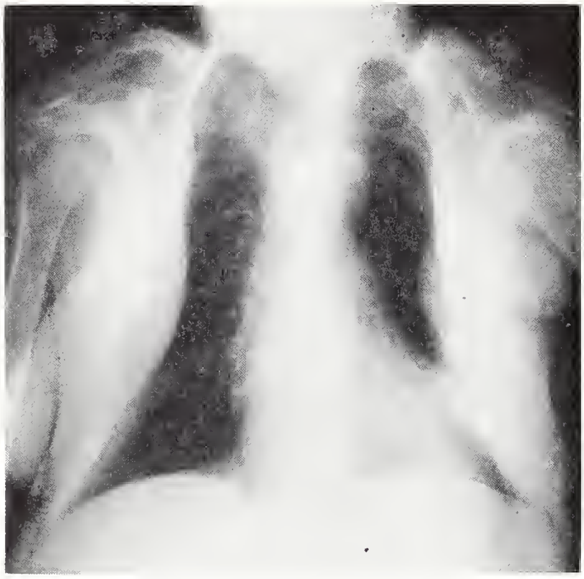


Fig. 9. Bell shaped deformity of thorax due to collapse of rib cage, secondary to hyperparathyroidism. Case 7.

exploration. Follow-up chest films (fig. 11a, b) failed to show any progression in the size or change in appearance of the tumor. A 6 cm. diameter, oval encapsulated mass was found attached to the right sympathetic trunk at thoracotomy, which proved to be a 41 gram neurofibroma (fig. 12).

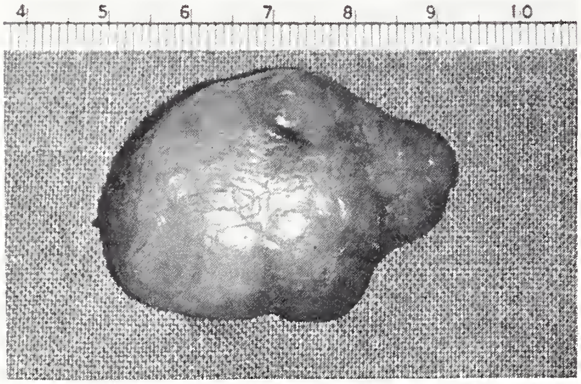
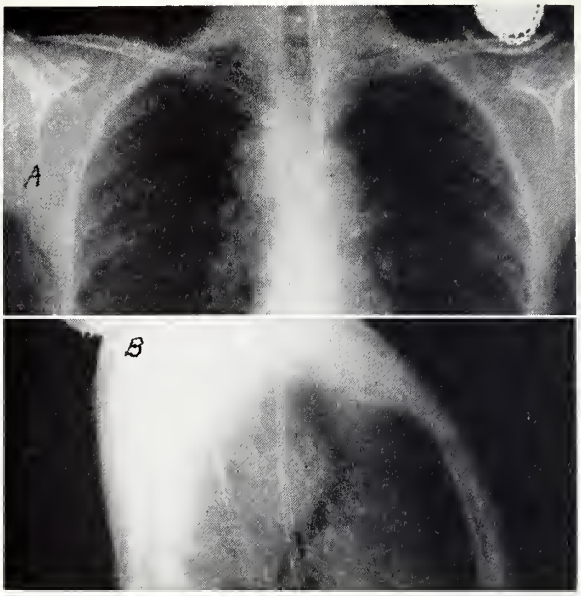


Fig. 10. Mediastinal parathyroid adenoma, immediately following excision through a collar incision with aid of a tablespoon. Case 7.

Case 9. D. R., a 33 year old white female, was admitted for evaluation of low back pain. A myelogram was negative. A lobulated posterior mediastinal mass was found on routine chest roentgenograms (fig. 13a, b). A right thoracotomy revealed a firm ovoid neurilemoma attached by a stalk to the sixth intercostal nerve, which when excised weighed 114 grams (fig. 14a, b).

Case 10. W. S., a 19 year old white male, was admitted because of sudden enlargement of a right middle mediastinal mass which had been detected two years previously on a routine chest x-ray (fig. 15a, b). The patient was asymptomatic with no abnormal physical findings referable to the thorax. At thoracotomy, a 7 cm. diameter fluctulent dermoid cyst was found above the right hilum, and removed without postoperative complications.



Fib. 11a, b. Neurofibroma of posterior mediastinum, attached to right sympathetic trunk. Case 8.

Case 11. M. C., a 40 year old white female, was referred to the Medical Center complaining of hemorrhoidal symptoms and of mild, dull retrosternal aching pains of two months duration. Routine chest x-rays demonstrated a mid-posterior mediastinal mass (fig. 16a, b). Bronchoscopy, radioactive iodine scanogram, scalene node biopsy, and barium swallow with fluoroscopy failed to aid in definitive diagnosis

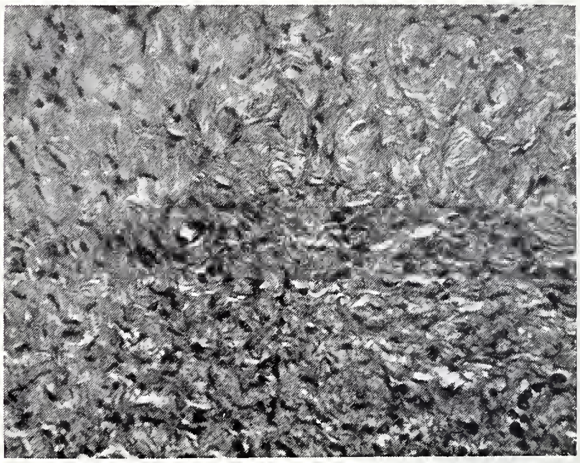


Fig. 12. Microscopic appearance of the neurofibroma, case 8. 350 x 1.43.

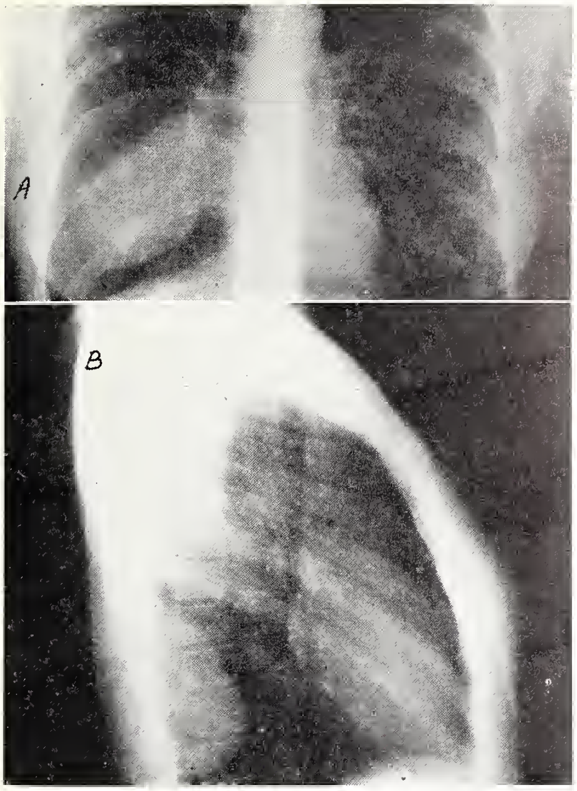


Fig. 13a, b. Neurilemoma of right posterior mediastinum, attached to the sixth intercostal nerve. Case 9.

prior to surgery. Exploration of the thyroid through a collar incision revealed a normal gland. Through a median sternotomy approach, a paratracheal bronchogenic cyst was delivered from the right posterior-superior mediastinum. Postoperatively, a Staphylococcus aureus wound infection occurred, which responded to therapy.

Discussion

Two parathyroid adenomas in eleven cases of mediastinal tumors present an abnormally high incidence. Only three parathyroid adenomas were found in a total series of 1,312 primary mediastinal tumors reported in ten series.[3, 5-13] Cope,[14] in his classic article, reported 49 cases of parathyroid adenomas, of which five were found in the anterior mediastinum and four in the posterior mediastinum. Seven additional cases of mediastinal parathyroid adenoma were reported (six anterior, one posterior) by Cope, but not included in his series, having been referred because of negative exploration elsewhere. Neither of our two cases were diagnosed as mediastinal adenomas preoperatively. The first case, an adenoma within the substance of the thymus gland, required median sternotomy

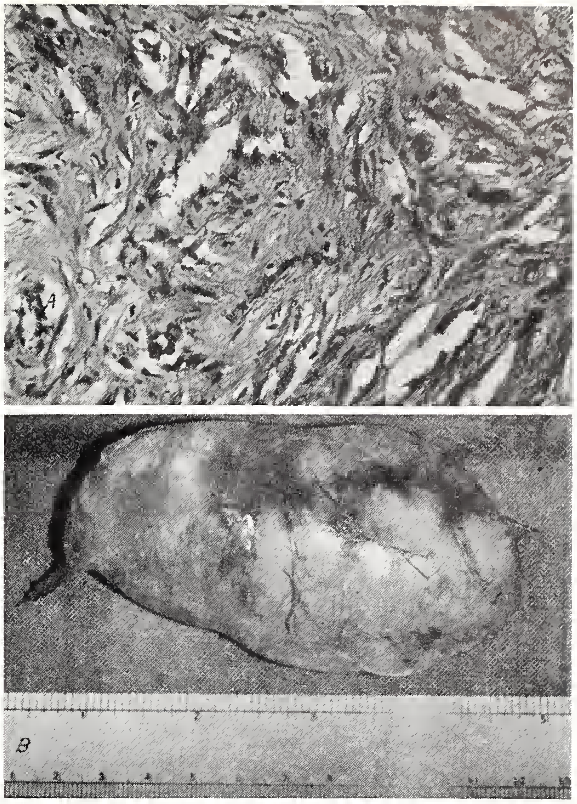


Fig. 14a. Microscopic appearance of the neurilemoma, case 9, showing a poorly developed Verocay body in the center of the field. 300 x 1.38. b. Gross appearance of a neurilemoma, case 9, immediately following excision.

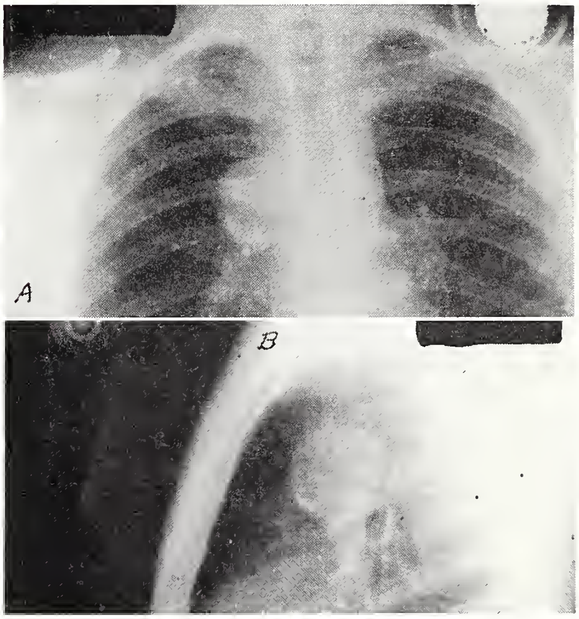


Fig. 15a, b. Dermoid cyst of the right middle mediastinum in a 19 year old male. Case 10.

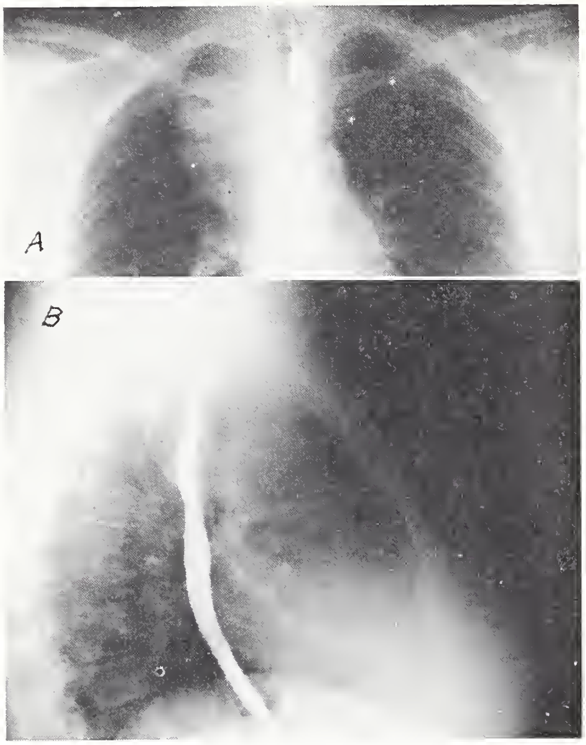


Fig. 16a, b. Right posterior-superior bronchogenic cyst. Case 11.

for exploration, while the second adenoma was removed through a collar approach. The problem of multiple adenomata was discussed by Cope who found approximately 10 per cent in his series.

Included as mediastinal tumors are five cases of goiter, each with the main bulk presenting below the thoracic inlet on roentgenograms of the chest and at time of exploration. There is some confusion in the literature as to the definition of a mediastinal goiter, with the incidence varying with the particular author's concept. Between 1 and 2 per cent of goiters are considered mediastinal, using this criteria.[15, 16] Seventy-eight cases of goiter out of 1,014 primary mediastinal tumors were reported in seven series reviewed in which the author included goiter as a mediastinal tumor, an incidence of 7.7 per cent.[6–9, 11, 12, 17] There was no continuity of two goiters in our series (cases 1 and 2) with the cervical gland. A median sternotomy was used in addition to a collar incision to facilitate excision of these two goiters and a 308 gram goiter found in the fifth case.

In most instances, a substernal goiter may be readily and safely removed through a collar incision. Much has been written concerning the advantages of removing more difficult mediastinal goiters through a collar incision, utilizing morcellation and avoiding the slight, but definite increased morbidity of adding thoracic exposure.[16, 18, 19] The use of median sternotomy for removal of anterior-superior mediastinal goiters after exploration through a collar incision has many proponents,[15, 20] although this type of thoracic exposure has fallen under criticism because of postoperative pain and the seriousness of wound infection.[17] Right anterolateral or posterolateral thoractomies are recommended approaches, especially for middle and posterior goiters in the mediastinum.[15, 16, 17] The addition of median sternotomy to cervical approach has definite advantages. Without adequate exposure, one may encounter hemorrhage from vascular attachments in the mediastinum that is difficult to control. Incomplete removal of a goiter may result. Elderly patients with cervical arthritis (case No. 5) make cervical exposure limited. Blind finger dissection in the upper mediastinum has definite risks. A thoracic approach has greater appeal than morcellation and dissection with relatively poor exposure. Postoperative morbidity resulting from median sternotomy in open heart surgery in our hands has been minimal.

Cases 8 and 9, of neurofibroma and neurilemoma, represent the two commonest neurogenic tumors of the mediastinum. Posterior mediastinal tumors are noted for being relatively silent. Case 9 had no symptoms referable to the thorax, the neurilemoma having been found on a routine chest film. The patient with neurofibromatosis refused surgery two and one half years previously because of lack of significant symptoms. Excluding the parathyroid adenomata, of the remaining seven cases, three tumors were found by routine chest roentgenograms. This method of detection has accounted for as high as 61 per cent of 155 cases in one series.[3]

The last two cases presented a somewhat confusing preoperative diagnostic picture, with both tumors failing to lie in the usual anatomic mediastinal division. The dermoid cyst, occurring in the great majority of cases in the anterior mediastinum, was found on x-ray to present in the right middle mediastinum, and at surgery, to lie above the right hilum. At exploration, the bronchogenic cyst was found to lie in the right posterior-superior mediastinum, having been located on roentgenograms as a posterior mediastinal mass. Bronchogenic cysts are found in the middle, superior or anterior mediastinum, but seldom posterior.

No malignancy was found among these patients. Twenty to 25 per cent of primary mediastinal tumors encountered at surgery are malignant,[6, 10-12] with one series running as high as 41 per cent of 101 cases.[7]

Postoperative complications occurred in the fourth and eleventh cases. Both had wound infections, the former of a collar incision which was transient, while the latter had a Staphylococcus aureus infection occurring at the drain site, which responded to therapy. No other morbidity was encountered.

SUMMARY

All mediastinal tumors should be considered potentially malignant, and though histologically benign, are life endangering because of tendencies for malignant degeneration, growth with encroachment upon vital organs, infection and rupture into vital structures. Exploratory thoracotomy is mandatory for accurate diagnosis and proper treatment in the majority of cases. Unnecessary delay in diagnostic efforts is to be avoided. A small but unusual series is presented, including two cases of hyperparathyroidism due to parathyroid adenomas of the mediastinum.

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Congenital Polycystic Kidney Disease

Polycystic renal disease is congenital, familial, bilateral, progressive and often associated with cyst formation in other organs as well as intracranial aneurysm.

History

More than 300 years ago Fabricius de Hilden, who died in 1624, first described renal cysts but gave no clear cut classification; but Lavern in 1876 first distinguished between solitary cysts and polycystic disease of the kidneys.

In an article by Crawford in 1923, the congenital nature of the condition was emphasized showing the not infrequent existence of concommitant congenital anomalies. Its occurrence in four generations was reported. He cited a case of a man with the disease who had seven children, three of whom died in uremia from it, one of these at age 74. Each of the other four children married and had children with polycystic kidneys. Major symptoms were pointed out as hematuria, pain, mass in loin, polydipsia, albuminuria, fixation of specific gravity of urine and a 24 hour urinary output in increase of normal.

In 1925 Cairns reported three generations involved in a London family with 10 members affected.

In 1926 Gottlieb reviewed a series of 68 cases, in which the average age varied from 24 to 66 years. Three were 2, 8, and 14 years. There were 45 females and 15 males where the sex was stated. Thirty-six were operated upon with 34 "cures" as follows: 19 nephrectomies with two deaths; ignipuncture five, puncture with nephropexy four, nephropexy three, decapsulation three, hemiresection one, nephrectomy one. All survivors improved for from months to years. He stated that nephrectomy was reserved for menace to life by severe hemorrhage or infection.

In 1928, Blatt in discussing the etiology of the condition stated that one no longer hears of Virchow's suggestion of retention in the canaliculi due to inflammation but that more likely one has to deal with (1) a tumor (multilocular cystic adenoma) or, probably, (2) a congenital malformation (latter supported by the familial tendency and frequent co-existence of other malformations).

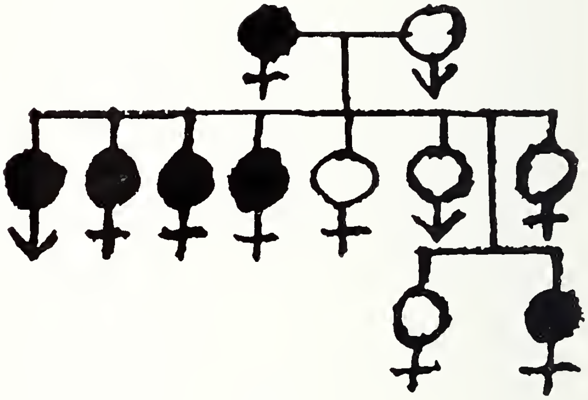

Fig. 1

In 1932 Bancker reported three generations involved with alternation of generations demonstrated.

In 1934 Braasch and Schacht at Mayo's reported 193 cases. The incidence at postmortem was nine in 9,171 cases or 1:1019. There were 193 instances in 680,000 registrations. Associated cystic disease of the liver was found in four of nine necropsies, pancreas in one. The average age at onset was 38.8 years. Average duration of life was 50 years. There was elevation of both systolic and diastolic blood pressure noted as 145 mm. or more systolic in 61 per cent and 90 mm. or more in 55 per cent diastolic. The pathology was found to be due as much or more

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That polycystic kidney disease is congenital is stressed. It is described as familial, bilateral and progressive. The history, symptoms, diagnosis and treatment are described. A report of a series of 113 cases is presented.

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to altered vascular condition of the kidneys. Gross hematuria occurred in 33 per cent. The hereditary nature of the disease should discourage progeny and sterilization should be considered according to the authors. Their surgical mortality was 13.8 per cent. Their youngest patient was 21 months, the oldest 69 years. Thirty-one nephrectomies were performed with only one surgical death.

In 1936 Twinem reported a case with bilateral perinephritis abscesses with recovery following bilateral drainage.

In 1938 Lazarus stated that in addition to previous indications, calculi and pressure on the ureter constitute complications of severe enough gravity to warrant surgery. He concluded that nephrectomy was indicated only when one kidney was totally destroyed and the other was capable of sustaining life, but that this action usually brought out the inherent weakness in the remaining kidney.

In 1941 Doolin divided polycystics into two groups: (1) congenital type are stillborn or die within the first year; (2) adult type, in which it appears after 20 years, progress slowly and have a long survival of 65 per cent.

In 1942 Norris and Herman in an anatomic study of embryos and fetuses of this disease, concluded that its cause is a degenerative one due to isolation of uriniferous tubules and collecting ducts occurring after differentiation of the metanephrogenic anlage forming cysts which are anastomosed by proliferation of these elements and rupture of their walls. Therefore the fundamental cause is in the germ plasm.

In 1946 Young advocated the injection of sclerosing solution of 5 per cent sodium morrhuate into the cysts. He followed his cases four years, two of them after marriage and delivery noting only permanent elevation of blood pressure and increased albuminuria.

Material

This report embraces 113 cases of congenital polycystic kidneys. All cases are Caucasion, there being 80 (71 per cent) males and 33 (29 per cent) females. The age of the cases in this study were all in the adult catagory and averaged at the time of first diagnosis 47 years with a high 82 and a low of 23 years. Average male was 48 and female 44 years.

Symptoms

Although most of the cases reported had more than one of the symptoms listed at the time of diagnosis, the chief presenting ones are shown in table 1.

The pain varied from generalized backache to unilateral colic, some due to pedicle drag from the shear weight of the enlarged kidney to colic produced by the kinking of the ureter or passage of blood clots or calculi.

TABLE 1

CHIEF PRESENTING SYMPTOMS

Symptoms	*Cases*	*Per Cent*
Pain	42	37.2
Mass	32	28.3
Hermaturia	25	22.1
Albuminuria	7	6.2
Fever	5	4.4
Nausea and vomiting	1	.9
Weight loss	1	.9
	113	100.0

Mass is meant to be a palpable enlargement of one or both kidneys. In many cases that were more advanced, nubbins could be felt on renal palpation.

Hematuria as a presenting symptom was always gross, and, in a few cases, severe enough to require surgery but only rarely nephrectomy.

Albuminuria, found incidentally in performing routine urinalysis, was responsible for discovery in some cases.

Nausea, vomiting and weight loss were the presenting symptoms in two cases.

Hypertension was not found in most cases. It was found in 12 cases varying from 198/110 to 210/125 which were definitely not terminal but it was present also in 12 terminal cases. Other renal function tests such as P.S.P. determination and nonprotein nitrogen, in this series, were found to vary according to the stage of advancement of the disease. There tended to be a correlation only in the more advanced or terminal stages with elevated blood pressure, nonprotein nitrogen and delayed and/or diminished P.S.P. output and appearance time.

Diagnosis

Positive verification of this disease was obtained at surgery on the kidney itself in 18 cases and on eight additional cases on abdominal procedures or other surgery not primarily for the kidney. Six more cases were proven at autopsy. Associated cysts of the ovary, pancreas and liver were found in three cases, two of them at sur-

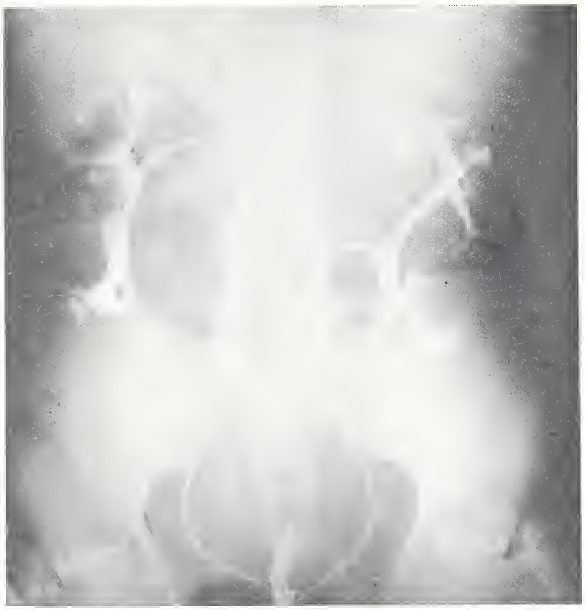

Fig. 2

gery and one at autopsy. In one case at postmortem, one kidney weighed 16 lbs. 8 ounces and the other 17 lbs. 4 ounces. Four cases were proven to have associated hypernephromas, and two of these were bilateral.

Clinical confirmation of this disease was obtained by family history involving many members in six cases, more than one of whom are included in this series. Six fathers were dead of the disease as were three mothers. There was a total of 17 cases with this positive history.

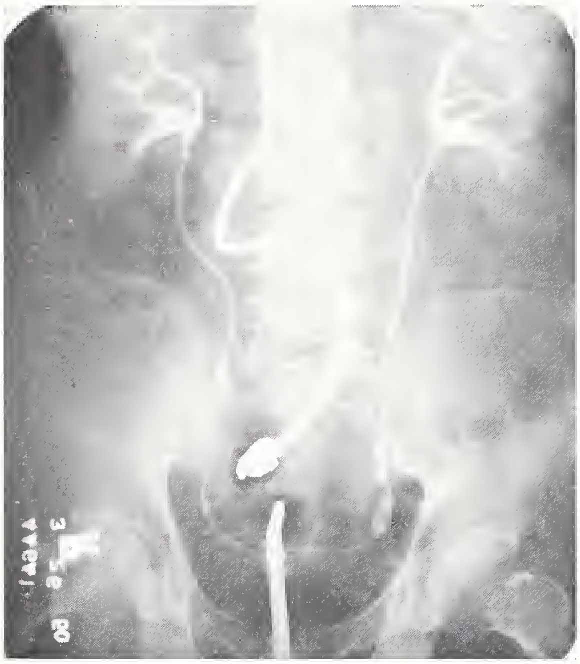

Fig. 3

Physical examination revealed palpably enlarged kidneys bilaterally in 38 caces. In addition, there were 24 such cases involving only the left side and 14 only the right. Many of these, especially the more advanced ones, revealed palpable nubbins. Some of these cases are included in the group with positive identification.

There were 25 cases in which the diagnosis was made from the pyelograms alone without other supporting evidence. There may be other roentgenologic characteristics of typical polycystic disease of the kidney, but three cardinal findings should be noted: (1) a definite increase in the longitudinal dimension of the kidney, i.e., the distance between the upper and the lower pole of the kidney (figure 1); (2) often there are spider-like infundibulae with marked elongation usually involving the entire calyceal system as differentiated from that one usually sees in a filling defect which involves only a single calyx and its corresponding infundibulum. (In figure 3 note especially left kidney. Miller-Abbott tube is for an ileus.) (3) one often observes cystic impingement on the normal calyceal pattern by hemispheric filling defects, multiple or single as illustrated in figure 4 both middle calyces.

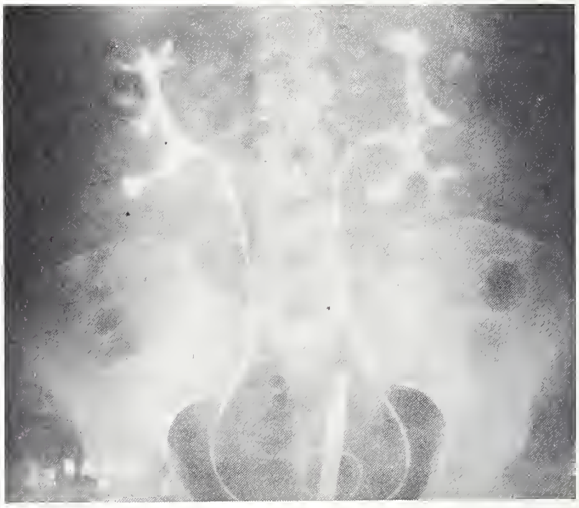

Fig. 4

Any combination or all of these features are pathognomonic of this disease as seen on pyelography.

Treatment

Medical treatment for the most part usually is adequate, consisting of supportive measures for

TABLE 2

SURVIVAL

Years	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*22*	*24*	*25*	*26*	*28*	*31*	*35*	
Living and Well	7	7	5	4	3	2	2	3	4	3	2	3	2	2	1	1		2			1	1	1	1	1		58
Died	6	2		1	1						1																11
Died other cause	3				1		1				1									1	1					1	9
Lost	23	6	1	1	1	1											1		1								35
Total	39	15	6	6	6	3	3	3	4	3	4	3	2	2	1	1	1	2	1	1	2	1	1	1	1	1	113

anemia, antibiotics for existing infection and hypertensive drugs where indicated or necessary. The patient also should be advised of the nature of the condition to avoid severe physical effort and bodily contact activity. Because of the hereditary characteristic, we advise our patients against marriage or, if married, against having progeny.

In spite of the advice of some authorities on this subject against the use of the Rovsing type of surgical procedure because they feel that it only hastens the ultimate death of the patient, we have performed eight of these operations either with the multiple cyst puncture alone or in combination with nephropexy or nephrostomy as the indication demanded with pleasing results for both patient and surgeon. Nephrectomy should be reserved for uncontrolled hemorrhage and tumor and adequate kidney tissue should be present on the opposite side before nephrectomy is considered even for these two conditions. Nephrectomy was performed in only four instances in this series and three of these cases were hypernephromata. One tumor patient died seven years later, one six years later and the other two are living and well 12 and 14 years later. Four nephropexies and two biopsies were performed, the latter for possible tumor in conjunction with the polycystic disease. In all, 26 surgical procedures were carried out with a single surgical death.

SURVIVAL

Following surgery there are 10 patients still under observation living and well; two for six years, one for seven years, two for eight years, one for 12 years, one for 13 years, one for 18 years, one for 25 years and one for 31 years. There were three patients dead after one year, one after six years and one after seven years, the latter two both having had hypernephromas. The other cases were lost to record or died of other causes after five years, one of these after 17 years.

The over-all survival for the entire series is shown in table 2.

CONCLUSIONS

1. The congenital nature of this condition is known but its familial tendency has not been sufficiently emphasized or publicized.

2. In selected cases surgery may be offered for relief of symptoms and prolongation of health and life.

3. Nephrectomy should never be performed except as a life saving necessity and only then if the other kidney is adequate to sustain life.

4. The survival table will show that many of these patients will live out their normal life.

5. Three pyelographic diagnostic aids with illustrations of each are demonstrated.

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Mental Retardation in Missouri

It is estimated that there are 126,000 mentally retarded persons in the State of Missouri, including the entire spectrum of intelligence from the borderline range down. What is done for these persons at present, plans for the future and the further need in care are discussed.

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SINCE THE DAWN of mankind, developmental defects, inherited derangements, disorders in metabolism, infections and injuries have plagued civilization with a variety of specie variants, which came to be known as feeble-mindedness.

Not being considered by society as dangerous nor a menace, the individual families with feeble-minded members were left to bear the burden of their sorrow with scarcely a gesture or indication of concern on the part of the community.

This passive, but not entirely negative, attitude is reflected in the substance of laws. In Illinois, for example, the Criminal Code of 1827 decreed that "An idiot shall not be found guilty or punished for any crime or misdemeanor with which he or she may be charged."

High neonatal and postnatal mortality served to control the number of feeble-minded children. Those who survived led empty and useless lives, often confined to cellars or attics for months and years. Even those now considered educable were deemed to be an economic loss.

During the last century, the increasing awareness of this burden brought about a clamor for governmental assistance, and various states established colonies, homes and state schools for these unfortunates.

Public apathy and indifference, and the chagrin, shame and guilt of families of these children contrived to achieve little if any substantial legislative support. Institutions actually struggled to survive with understaffing, overcrowding, and inadequate funds, being ever vulnerable to attack and criticism.

For sixty years, the Missouri State School at Marshall, through its faithful, loyal, sincere and dedicated employees, attempted to serve the needs of the feeble-minded in the face of disheartening frustrations.

The opening of the St. Louis State Training School, which was established by the City of St. Louis in 1922 and transferred to the State in 1948, simply compounded the problem with an already overcrowded facility.

As long as the appropriation of additional funds was deemed unjustified and even a waste of tax money, the tragic consequences simply perpetuated.

Through two wars and a depression, the status of the feeble-minded, or as is now preferred—the retarded child, remained bleak.

Public opinion had to awaken and demand a change. Public opinion did awaken and decried the results of years of apathy. The spark came from parent groups who finally discarded their mantle of guilt, rolled up their sleeves, and began to talk and act.

The last ten years have been a revelation—vitalizing and courageous. At times, anxiety and urgency has overwhelmed good judgment and good planning and disrupted progress. An absence of coordinated planning with the governmental agencies, pioneers in the field, has left many gaps in the total effort.

However, the potential for growth for this decade looms to be even more remarkable. Let us view the extent of this problem as it exists nationally and in the State of Missouri.

The extent of the problem of mental retardation can be appreciated more if one notes that it is four times as prevalent as rheumatic heart disease, nine times as prevalent as cerebral palsy, and fifteen times as prevalent as blindness.

In the national scene, if one assumes a population of 180,000,000, there are 5,400,000 mentally retarded, based upon a 3 per cent estimate. Of the 3 per cent, 2.6 per cent, or 4,280,000, are educable. Three-tenths per cent, or 540,000, are trainable. One-tenth per cent, or 180,000, are custodial.

Nationwide estimates indicate that of the total census of mentally retarded, 25 per cent of the custodial group, 15 per cent of the trainable and 1 per cent of the educable are institutionalized.

If one brings into focus this same data for the State of Missouri, the following statistics result. Assuming a population of 4,200,000, there would be 126,000 mentally retarded in this state including the entire spectrum of intelligence from the borderline range down.

Using the same percentages, there are in Missouri, 4,200 custodial patients psychologically classified as idiots, and 12,600 trainable children psychologically grouped as imbeciles. The remainder—109,000—are the educable children who psychologically would be in the moron or high-grade defective range. Expressing this in percentages, there are 3 per cent custodial, 10 per cent trainable and 87 per cent educable.

The figure of 126,000 includes the retarded of all ages. All ages over 5 years are included in the population of state schools, even though for a number of years admissions have been limited to the 5 to 20 year span.

Of the 126,000, it is estimated that approximately 6,300 or 5 per cent will need the type of residential care that should be provided in a state school. Since the state schools even with critical overcrowding only provide care for 2,500, there obviously must be 3,800 seriously mentally retarded in Missouri for whom beds are needed.

If one adds to this figure of 3,800 beds needed for mentally retarded not now in state schools, the figure of 900, which is the number of additional beds needed to relieve overcrowding, and further add 700 beds for mentally retarded patients currently being cared for in state hospitals, one reaches a total of 5,400 additional beds needed to meet the problem as it exists today in Missouri.

This number would fill five small institutions, averaging 1,000 to 1,200 patients each.

In round numbers, there are 100,000 births yearly in Missouri. Three per cent would total 3,000. Three thousand of the children born each year are mentally retarded to varying degrees. If one assumes 5 per cent will require the type of residential program that can be provided by a state school, 150 babies would be candidates for the waiting list yearly.

I must call attention to another interesting and significant fact. The custodial and trainable retarded children in this state—3 per cent and 10 per cent respectively—total 13 per cent of the 126,000. Thirteen per cent then of the mentally retarded children born are in the custodial and trainable groups. However, the same groups in the two institutions comprise 70 per cent of the total patient population.

The past decade has shown a slow, but gradual, modification in the distribution of patients in institutions, with the custodial-type patient on the increase and the educable patient entering in decreasing numbers. Consider then for a moment the critical need for an increase in nursing personnel which this situation has created.

The gradual development of special classes in the public school system, which now provides long-needed educational opportunities for more than 12,000 children, as well as the seventeen training centers offering training opportunities to about 480 children have really taken over virgin territory. Prior to this development, most of these children were denied educational opportunities.

The educable child who did enter the state schools came not because of the desire or need for academic training, but because of a critical socio-economic problem which had brought the family before either the welfare authorities or the juvenile court. Institution placement seemed the inevitable recommendation.

Even to this day, the concern for the care, development and training of the mentally retarded remains a scattered responsibility with confusion and conflict obscuring the roles of those dedicated to serve. The contributions are multi-disciplinary, with family physicians, pediatricians, obstetricians, psychiatrists, as well as psychologists, teachers, sociologists, social workers, nurses, chaplains, orthopedic surgeons, rehabilitation counselors and activity therapists all concerned with some segment. The absence of dominant leadership of any particular discipline has been a real factor in the lethargy. Unfortunately, the parents groups so constructive and stimulating during the last several years have clouded this main issue repeatedly because of special identifications, usually a retarded child in the home.

The Group for the Advancement of Psychiatry issued Report No. 43 pertaining to the problem of mental retardation. Among the several aspects of this serious problem, the report contrasts the precipitating factors leading to residential care for the low-grade mental defectives as compared to the high-grade mental defectives.

What is most striking is that the physical status of the low-grade mentally retarded child is of paramount importance as a factor leading to the need for residential care, while psychologic status is the last in the list. On the other hand, for the high-grade mental defective, the psychologic status of the retarded person is first in importance, and the physical status is last.

The following is a list of the significant points mentioned in a decreasing order of importance, as applied to the low-grade mental defective: (1) physical status; (2) family structure, attitudes and economic status; (3) residential facilities available; (4) socio-cultural attitudes; (5) community facilities and programs available, and (6) psychologic status.

Also in a decreasing order of importance the following points are significant for the high-grade mental defective: (1) psychologic status; (2) socio-cultural attitudes; (3) family structure, attitudes and economic status; (4) community facilities and programs available; (5) residential facilities available, and (6) somatic factors.

Before attempting to correlate the discussion thus far to the program which may be proposed in the coming biennia, let me refer to situations in two other states from whom rather interesting and pertinent data have been obtained.

The State of Illinois with a present population of 9,230,000 assumes that by 1970 it will need 8,000 additional beds in order to meet population increase, reduce overcrowding and accommodate the waiting list. Two thousand beds are estimated for population increase.

Four thousand beds are needed now to reduce overcrowding and accommodate the waiting list, with another 2,000 needed by 1970.

The present combined census of the two state schools in Illinois is 9,200.

There is presently under construction a 576-bed facility in Chicago specially planned for mentally retarded children under 6 years of age. Both the institutions at Lincoln and Dixon will continue to care for babies since both have large nursery programs. The institution at Lincoln is 38 per cent overcrowded and Dixon is 50 per cent overcrowded. The waiting list now totals 1,432 with 43 per cent under 6 years of age.

Conservative estimates for planning staff development have recommended that the personnel of the two state schools be doubled.

A recommendation for total community care in Illinois emphasizes the following needs: (1) an evaluation center, (2) family services, (3) public school program, (4) day care program for those ineligible for the public school program, (5) recreational activities, (6) pre-vocational and vocational rehabilitation, (7) sheltered workshop, (8) activity center, (9) short-term emergency care and (10) research.

A report from the State of Pennsylvania indicates that that state, which might approximate Illinois in size, has approximately 11,000 in residence—9,000 in three institutions, 900 in the Laurelton Village for delinquent retarded females, 825 in the Elwyn Training School supported by appropriations, and 600 in private institutions, whose care is paid for by the state. In addition, a sanitarium has been converted into a facility for the mentally retarded and now cares for 400 trainable and 600 crib cases.

Under construction at this time are 1,500 with a goal of 4,500 beds.

There are presently 2,800 on the waiting list in Pennsylvania. During the last ten years, the average age of applicants has been decreasing from 13 down to 7 years of age.

An analysis of the 11,000 patients in residence reveals 1,500 crib patients, 3,000 non-trainable, 5,500 trainable and 1,000 educable.

All applications for admission are directed to one of three evaluation centers which have been established at Pittsburgh, Harrisburg and Philadelphia. The determinations are made at these evaluation centers for the subsequent care or treatment program necessary.

Recommendations from the State of Pennsylvania stress the need for evaluation centers, since the following results have been shown:

1. Fully 50 per cent of the children referred could best be treated in the community.
2. Permits significant improvement in the hospitals by slowing down the tendency to "dump" patients without any effort at attempting to use other resources.
3. Has developed better community contacts, invaluable when a patient is released.
4. Members of the evaluation center's staffs have given service quite freely as consultants and have made it possible to convert a number of orphanages into residential treatment centers.

Turning again to the situation in Missouri, it is quite evident that the retarded child who is a custodial case will invariably be diagnosed during the first year of life. The trainable child may have a final diagnosis deferred perhaps until the third year of life. However, by the fifth year, most children who would be described as educable have already been identified and inquiries for resources already begun.

With the custodial patient, a number of individuals, agencies or programs become involved quite early. The obstetrician and/or the pediatrician have the unhappy task of informing the parents. There is a need here for parent education. The family physician and pastor can be helpful. The services of the evaluation clinic can be sought but, in most cases, this would simply be confirmatory. Care in the home is usually undertaken for a period of time, but usually care and treatment outside of the home is the better solution. This may be private residential care, but more often the patient will become a ward or partial ward of the state and be cared for in a state school. The great majority of these patients will remain indefinitely in the state institution.

The family physician is usually the one who becomes directly involved when evidence develops that a child in a family is retarded at the trainable level. The evaluation clinic here is helpful since it can more effectively identify the needs of the child, its potential and recommend a program. Psychologists and social workers are available to more fully interpret and to insure acceptance and cooperation rather than rejection and shame. Home training can be begun with some effort at preschool training. There are possibilities of a day care program for the child, but the training centers now are in a better position to provide the necessary media of growth for these children. Recreational activities have been developed by parent groups and some patients are able to participate in a sheltered type of work program. Of course, a certain number will be placed in private residential institutions and others may be admitted to state schools. It is usually problems other than the patient himself which determine the need for a state facility. As of now, no additional programs of significance have been developed for children who graduate from training centers and who must have some program or some activity even though they may be indefinitely nonproductive in the socio-economic scheme of things.

The child described as educable and who psychologically is called a high-grade mental defective may or may not have been detected by the family until an attempt was made to have the youngster compete in a normal classroom program. Here referral to special education may substitute for the evaluation clinic, but the latter can be helpful in presenting to the family the total problem. Family counseling is much in order and the youngster may spend the next several years in the special education program. This, with vocational rehabilitation training, sheltered workshops, followed by job placement, can make it possible for many in this group to become contributors to society and possibly even self-sufficient. Along the way, of course, it may be necessary for foster home placement to be considered or care in a private residential program. A certain percentage of children will inevitably enter state schools for a period of time, the determinant being largely behavioral with which the courts have become concerned or socio-economic which have brought the welfare agencies into the situation and precipitated a removal of the child from the home environment. The high-grade defective, who is a delinquent, poorly adjusted or unadjusted, is not likely to profit as much from vocational training and sheltered workshops. Many may adjust only to the state school program and remain in the industrial therapy section indefinitely.

While the basic legal concern of the Division of Mental Diseases for the mentally retarded child must be limited to those entering state schools, yet a more effective working relationship between agencies must be developed.

No one agency can meet all the needs of all the retarded children. Actually, no one agency can meet all the needs of a certain group of retarded children since there is a shift in the needs as part of growth and development, let alone intercurrent medical conditions. There is a need to delineate somewhat more clearly the agencies' responsibilities. Evaluation and diagnostic facilities are not lacking as much at this time as are the means to carry out the recommendations and suggestions of the evaluation clinics.

A restatement of the foregoing in a tabulated form may serve to illustrate the utilization of the various community resources. These are listed in a flexible order based on the growth and developmental needs of each type of retarded child.

EVALUATION AND DIAGNOSTIC FACILITIES

Custodial	*Trainable*	*Educable*
Home Care	Home Training	Home Guidance
Obstetrician	Family Physician	Evaluation Clinic
or	Evaluation Clinic	Family Counseling
Pediatrician	Family Counseling	Special Education Program
or	Child Welfare	Recreation
Family Physician	Pre-school	Child Welfare
Clergyman	Recreation	Vocation Rehabilitation
Family Counseling	Day Care Program	Sheltered Workshop
Child Welfare	Training Center	Job Placement
Private Nursery	Sheltered Activity Center	(State School)
Boarding Home	Limited Vocational	
Private School	Private School	
State School	State School	

It is quite evident that the care and training of the mentally retarded is unique in the multiplicity of resources utilized.

In the main, programs for the mentally retarded fall into several discrete areas—medical, educational, behavioral and vocational. Some may be medical problems indefinitely, while others in educational programs may need no more medical attention than the average youngster in public school. The state can no longer be the agency responsible for all forms, all degrees and all varieties of needs and demands. In fact, the remarkable shift in emphasis which is now in evidence throughout the country must be recognized. The source of strength, the source of hope, and the answers to questions of prevention of specific conditions and behavioral disorders leading to delinquency and crime are in the family. The family unit must be supported, stabilized and strengthened, with community resources, right in the community. Both for a brighter future as well as a decided improvement in the present program of care and training for the mentally retarded, a number of recommendations become self-evident from the preceding observations.

1. Overcrowding must be reduced. The present situation frustrates the finest efforts, both medically and educationally. The St. Louis State School and Hospital as well as the Higginsville State School and Hospital can be enlarged. In addition, a new institution should be considered.

2. Qualified professional staff must be recruited in all treatment disciplines.

3. Program development must be stimulated in each state school to elicit the maximum potential of growth within the capacity of each child.

4. Out-patient guidance and counseling center are needed at each school for parents and families or retarded children which should serve as an additional evaluation benefit.

5. Cooperative Inter-Agency Activities:

a. Division of Welfare.

b. Division of Health.

c. University of Missouri, St. Louis and Washington University.

(1) Special education.
(2) Medical School.
(3) Department of Psychology.
(4) Department of Social Work.
(5) Vocational Rehabilitation.

d. Program for educable retarded in public school system.

e. Program for trainable retarded in centers.

f. Units of Missouri Association for Retarded Children.

g. Evaluation Centers and Residential Treatment Centers.

h. Probate and Juvenile Courts.

6. Community Health Centers (all purpose):

a. Sponsorship:

(1) Local citizens' committee.

b. Operation:

(1) Private funds.
(2) Community Chest.
(3) Tax Support: city, county, state.

c. Services:

(1) Emotionally disturbed and mentally ill children and adults.
(2) Mentally retarded.
(3) Patients on convalescent leave.
(4) Mental health education.
(5) Consultative.

d. Liaison:

(1) Inter-agency at local level.
(2) Inter-agency at state level.

7. Research in Mental Retardation:

a. Biological—essentially investigations which may lead to prevention of mental retardation.

b. Pediatric—evaluation of degree of physiological defects to insure maximum development.

c. Academic—teaching methods, subject material, classroom arrangement and climate.

d. Psychologic—mental and emotional capacities determined to assist retarded person achieve practical goals.

e. Sociologic—group relationship and reactions in the family and community.

f. Psychiatric—behavioral, emotional and psychotic states as frustration deviations for the mentally retarded as well as the family.

Conclusion

Mental retardation in some form may be a product of human fertility for generations. Broad, persistent, intensive research has and will unravel much which today is confusing, disheartening and completely misunderstood. However, a better and better job can and must be done with what is known and what is available.

The recommendations outlined are basic even for present operations. The 126,000 retarded persons in Missouri might well represent 100,000 families. Many need a variety of services, others considerable help in one or more aspects of their problem. All must more fully inform themselves of resources. Resolving of many needs as pre-

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Amphotericin B and Its Use In the Deep Mycoses

THIS PAPER will attempt to delineate the present status of a new drug, Amphotericin B, in the therapy of systemic mycotic infections.

The apparent rise in the number of systematized infections seen is due not only to better diagnostic methods and increased interest, but is attended by a real rise in numbers due to iatrogenic complications of therapy.

The deep mycoses are known to attack the pulmonary, renal, gastrointestinal, cutaneous, osseous and central nervous systems. In general, the chances of dissemination are greater in dark-skinned peoples, but no ethnic group is immune. The deep mycoses exist in three categories:

(1) Primary infections with coccidioidomycosis, histoplasmosis, North and South American blastomycosis, cryptococcosis, sporotrichosis, actinomycosis, nocardiosis and moniliasis.

(2) Secondary infections complicating broad spectrum antibiotic therapy, the outstanding example of which is moniliasis, and

(3) Secondary infections occurring after therapy with nitrogen mustards, steroids or antibiotics; or complicating tuberculosis, sarcoid and the lymphomata. The organisms seen here are cryptococcosis, histoplasmosis, aspergillosis, mucormycosis and Candida albicans.

Until three years ago, therapeutic armamentarium was pitiful indeed, and systemic blastomycosis, for instance, was attended with a 93 per cent mortality rate. In 1956, two related antibiotics, Amphotericins A and B, were isolated in crystalline form from an unknown streptomycete culture obtained from soil of the Orinoco River region of Venezuela. They are members of a large family of polyene antifungal agents, as is nystatin, and early in vitro studies showed them to inhibit growth of a large number of pathogenic and nonpathogenic fungi, yeasts and yeast-like fungi. Their effect was fungistatic, not fungicidal. No effects were noted on bacteria, rickettsia, protozoa or viruses.

Amphotericin B is the most powerful antifungal antibiotic at present available in the medical world. Being on the scene a scant three plus years, and available extensively less than two years, its dramatic effects in patients infected with the deep mycoses have won it a high place in the world's therapeutic armamentarium. The drug itself, its dosages and routes of administration, its toxic manifestations, its triumphs and its failures are reviewed.

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They derive their name from their amphoteric property of greater solubility in aqueous alcohols and in water at high and low pH. The two

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Mental Retardation—Continued

viously indicated must be begun—overcrowding, understaffing, development of community resources, research and a greater degree and effectiveness of inter-agency cooperation. Human needs must transcend self-imposed operational schedules. The care of the mentally retarded of Missouri is the responsibility of all its citizens.

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amphotericins differ in solubility, ultra-violet absorption, specific rotation and extinction coefficients. Both deteriorate in solution due to oxidation and hydrolysis within 24 hours, and both are precipitated by saline. The amphotericins are made for commercial use as a sodium desoxycholate complex, enabling the mixture to get into colloidal suspension, and are available in vials containing 50 mgs. of sterile lyophillized powder. These vials (1) must not be exposed to light or heat, (2) must be kept refrigerated when opened, and (3) must be used within 24 hours if opened. The drugs have been repeatedly shown to be poorly absorbed from the gastrointestinal tract, and the intravenous route is generally now used. Measurable blood levels persist for 18 hours after intravenous administration has been discontinued, suggesting it is slowly excreted by as yet unknown renal mechanisms. Its rate of disappearance from the serum is directly proportional to its concentration in the serum.

Having discussed the "basic science" of the drug, I will discuss its clinical applications.

Amphotericin B has proven superior to Amphotericin A for clinical use, and my discussion will now be limited to the B form alone. There has been no acquired resistance of previously sensitive organisms to date in vivo, but in vitro acquired resistance is occasionally seen in some Candida species and in coccidioides immitis.

Norcardia, aspergillus, Hormodendrum and Phialophora are relatively resistant initially.

The indication for use of the drug is absolute diagnosis of systematized mycoses—or as close to absolute diagnosis as is clinically possible.

Cutaneous lesions should be confirmed by culture or microscopy, and it should be remembered that cutaneous lesions of blastomycosis, coccidioidomycosis, histoplasmosis and cryptococcosis in all probability represent only dermadromes of systemic disease, and, except for cases of inoculation, as with laboratory personnel, systematization of the disease is present.

Cryptococcus neoformans, or Torula, is the most common mycotic organism causing meningitis in man, and has proven highly susceptible to the drug. Disseminated torulosis is more amenable than the meningo-encephalitic form, probably due to the internal hydrocephalus which so frequently follows the latter. Dozens of amazing responses have been documented. For instance, a patient comatose for four months responded in 20 days and was left with a flaccid paresis of one extremity as the only residua. Spinal fluid cultures became negative four days after therapy was begun. In such cases intrathecal administration is an invaluable adjunct, and the Mayo Clinic has administered Amphotericin intraventricularly into the brain via ventriculostomy catheters placed for drainage. In Boston, 8-methoxypsoralin and sunlight were added for antifungal effect in a case of systemic cryptococcosis, apparently assisting in obtaining a total cure.

The response of coccidioides varies. A case of pulmonary coccidioidomycosis of eight years duration was treated by Dr. Arthur Curtis at the University of Michigan for 12 months, and the patient is alive and well 24 months after therapy was stopped. Coccidioidal osteomyelitis has an excellent response, with the drug given by intra-articular and local routes. A case of multiple abscesses of 10 years duration was treated for 12 weeks, and all 30 abcesses healed. Treatment was continued another 12 months. Coccidioidal myocarditis responded magnificently in a case reported from New Orleans.

Another organism hard hit by the drug has been Histoplasma capsulatum. Two of my former colleagues from Kansas City, Drs. Furculow and Rubin, have repeatedly electrified workers in the field with their original research on acute and chronic pulmonary histoplasmosis, with and without systematization, and subsequent therapy with Amphotericin B. They have documented melting away of tumor masses, re-expansion of atelectatic lobes, and obliteration of cavitary disease. Massive cutaneous granulomata of Histoplasmosis have disappeared after 24 days of intravenous injections.

Better than nystatin against disseminated Candidiasis, Amphotericin B has shown immediate and life-saving effects against resistant monilia. However, infants with agammaglobulinemia and antibiotic-induced moniliasis have done poorly regardless of the therapeutic agent used.

A patient with disseminated sporotrichosis and knee joint involvement treated at the University of Michigan showed resolution of the arthopathy first. Laryngopharyngeal granulomata were the last foci to be eradicated.

A rare case of Candida parakrusei of the eyeball was successfully managed in New York.

For both North and South American blastomycosis, Amphotericin B has supplanted stilbamidine and hydroxystilbamidine as the drug of choice. Whereas previously all patients with blastomycotic meningitis died, the salvage rate is now 75 per cent. Even widespread pulmonary cavitary disease due to North American blastomycosis in a moribund patient at the University of Michigan responded miraculously.

In February 1959, Dr. Maurice Costello reported from New York the first case of chromoblastomycosis treated with local injections of Amphotericin B solution. This was possible because the organism does not systematize, and does not involve bone or subcutaneous integument. The trial was necessitated by the fact that one must get an intravenous level of 40 mg. per cc. to inhibit growth, which far exceeds the maximal dose tolerated by humans. This initial success has been followed by two more reports of successful cures by local infiltration of chromoblastomycotic lesions. A fourth case was reported in September, 1959, in which local infiltration per se was unsuccessful, and here Amphotericin B was diluted and tatooed by vibrapuncture technic into and through the skin three times a week, with cure in three months. The depth of needle implantation was controlled by serial biopsies.

Cases of pulmonary aspergillosis fumigatus complicating blood dyscrasias or bronchiectasis have been singularly unaffected, there being only one case thus far reported of proven pulmonary aspergillosis responding to Amphotericin therapy.

There are no reported cases in the literature of success or failure in the treatment of madura foot with Amphotericin B, regardless of etiologic organism. At our own hospital, attempting both local infiltration and intravenous delivery, we have been unsuccessful in affecting a case of madura foot. It is worthy to mention the extreme difficulty encountered when attempting to deliver the medication into the concrete resistance of affected tissues, and must therefore recommend the intravenous route if further cases merit a trial of therapy.

Routes of delivery of the drug are numerous, and require strict adherence to certain rules. For intravenous administration, the original dose should be computed at 0.1 mg. per kg. body weight, dissolved in 500 cc. of 5 per cent dextrose in water (not saline), and perfused over a 6 to 12 hour period. Each mg. of Amphotericin B must be dissolved in at least 5 ml. of diluent. If no adverse reactions are encountered, one may next deliver 0.25 mg. per kg. body weight, increasing the dosage by 0.1 mg. per kg. every day or every other day as tolerated, to an absolute maximum of 1.5 mg. per kg. per day. A blood transfusion filter apparatus will assist in filtering out of solution visible particles of the agent. The use of small 22 or 24 guage needles is encouraged, starting at distal venous tributaries and carefully avoiding perivascular infiltration. Warming the solutions by tying the proximal tube to a warm towel will help preclude reactions. If it is necessary to interrupt the course of intravenous doses for two days or more, it is mandatory to restart again at the lowest dosage, and again titrate up to a maximal tolerated dose. Oral dosage is no longer recommended. Intramuscular administration gives poor blood levels regardless of whether or not hyaluronidase or steroids are used concomitantly. For intrathecal use, the drug may be given from 0.25 to 0.7 mg. as a total dose. Cerebrospinal fluid is removed, admixed with the drug, and reinstalled via the needle. Since this makes a hyperbaric solution, irritation of dependent nerve roots is frequent. A demonstrable drug level persists up to 36 hours, and is gone by 48 hours. Also, since cerebrospinal fluid protein may even double under stimulation of the drug, this rise should not be misinterpreted as a worsening of the disease process itself.

For bone abscess cavities, local irrigation is done by dissolving 50 mg. in 100 cc. of distilled water, and irrigating this quantity several times a day. Local injection of suppurative lymph nodes and areas of osteomyelitis may be done with equivalent dosages. 50 mg. dissolved in 10 cc. of distilled water may be used to deliver 4 to 8 cc. from one to three times per week locally into involved skin.

Intra-articular administration may be done every other day with 25 mg. dissolved in water. Streptokinase and streptodornase are believed by some to help in this situation.

Intrathoracic and intrapulmonary administration have been accomplished by tube and by needle. Here 5 mgs. is diluted and injected locally every six hours. Another successful approach is aerosal inhalatoin therapy, again using 5 mg. quantities.

Topically, a 1 per cent ointment has proved efficacious in therapy of cutaneous moniliasis, but a 1 per cent ophthalmic solution proved irritating in two cases in which it was tried. Although both amphotericins have been used against superficial fungi, neither has proven even of mediocre worth. Of 100 cases of tinea treated with the drug by Fraser and Knox, only four were considered "cured." However, this did not hold true for superficial monilia in their series, in which 18 of 28 cases were "cured."

Ancillary surgical therapy should be used, as indicated, based on sound surgical principles. Thus debridement, drainage of abscesses, immobilization of affected areas, bed rest, therapy of secondary infections and high frequency electrocautery may all be used. If surgery such as pulmonary resection is planned, the patient should be treated with intravenous Amphotericin B for six to eight weeks prior to the procedure. It should always be remembered that prolonging treatment at lower dosage is much better than short term high dosage therapy.

Complications from therapy are protean, and patients under treatment must be carefully observed. Chills and fever occur in 95 per cent of patients receiving intravenous Amphotericin B. One can temporarily discontinue the drug by using a "cut off" clamp in a two bottle set-up, rest 10 minutes, and then continue by opening the clamp again. We customarily give salicylates prior to starting the infusion, and again after 300 cc. have been given. The salicylates also help the severe cephalalgia which 45 per cent of patients develop. Nausea occurs in 20 per cent of patients, and 100 mg. of pyridoxine hydrochloride added to the infusion decreases this. Anorexia is noted by 60 per cent, but seems limited to the meal following the infusion, while emesis occurs in just 5 per cent of patients. Cramping abdominal pain, worst in the epigastrium, is noted in 50 per cent of patients, melena in 5 per cent and phlebitis in 5 per cent. The addition of 10 mg. of Heparin sodium helps prevent phlebitic complications, as do frequent shifts of the port of entry and the use of small needles.

Azotemia heralded by a rise in blood urea nitrogen is found in 35 per cent of patients. This sign should signal discontinuance of therapy in all cases except those in which it is imperative to continue. There have, however, been no recorded cases of permanent renal damage following BUN elevations. Therapy may be reinstituted when the BUN returns to normal limits. Petechial hemorrhages have been noted in the skin, and diffusely throughout the gastrointestinal tract. Thrombocytopenia, exfoliative dematitis, morbilliform eruptions, anaphylaxis with cyanosis and shock, hyperthermia to 121 F., blurring of vision, and convulsions have been all described. Electrocardiographic prolongation of the QT interval, severe depression of cardiac conduction to the point of cardiac standstill, and severe hypokalemia with hyperkaluria have been recorded. Severe crushing substernal pain has been seen by us, not alleviated with sublingual nitroglycerin. Intrathecal Amphotericin B was believed causative in the development of arachnoiditis in one patient. It must be remembered that different lots of the drug may vary, and thus reactions be evinced at supposedly equivalent dosage levels.

I realize this is an imposing—if not frightening—array of complications, but these must be evaluated in context with the debilitating or fatal disease entities with which one is dealing. Besides complications which threaten life itself, the drug need never be permanently discontinued, although slowing the rate of infusion, decreasing the quantity per infusion, and lessening the frequency of infusion may all become necessary. Our knowledge of both diseases and drug increases every month, and changes are constant. The final place of Amphotericin B will be decided by the events of the future. At the present time, it reigns supreme as the finest agent for the treatment of the systemic mycoses.

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Malignant Melanoma of Rectum

A Case Report

Malignant melanoma of the anus and rectum accounts for approximately 0.25 per cent of anorectal malignant neoplasms and 1 per cent of epitheliomatous lesions in this location. Data from various sources indicate that the incidence is from 1.8 to 4.4 times as great in the white race as in the American Negro. A case report is presented.

Dr. Ohin is Chief Resident in General Surgery at the Homer G. Phillips Hospital, St. Louis.

Malignant melanoma of the anus and rectum comprises approximately 0.25 per cent of anorectal malignant neoplasms of all types and about 1 per cent of all epitheliomatous lesions of this location.

Laennec in 1806 first gave a good description of melanotic tumors as they affect man. For several years veterinarians had described hereditary "black tumors" of the rectum of white and gray horses. It was not until 1857, however, that Moore first described a case of melanoma of the rectum in man. Other cases were reported by Paneth (1883), Schmidt and Peterson (1888), and Sigerist (Germany), Quenu and Hartman (France) reported twenty cases each in 1893. In 1901 Heller reviewed data on 25 cases and the thesis of Loques in Montpellier in 1908 included a description of two additional cases.[2]

In 1912 and 1913 Chalier and Bonnet published several papers and reported a case of their own.[2] In 1948 Raven collected more than 100 cases of malignant melanoma of the anorectal margin from the literature. Miles saw only three cases in 1,500 malignancies of the rectum.[1] Braastad, et al., reported 10 cases at the Mayo Clinic up to 1948. From the Ochsner Clinic, Hines and Ridden[4] reported two cases of malignant melanoma of rectum on 30,000 proctologic examinations on private patients seen in an eight year period ending in June 1950. One of these cases was on a 70 year old Negro man and appears to be the first reported on Negroes in the literature.

Before reporting this case, I feel that it might be of interest to recall that the over-all incidence of all malignant melanoma in Negroes is lower than in the white race. This incidence calculated from data from a number of sources varies from 1.8 to 4.4 times as great in the white race as in the American Negro.[4] Matas from the Charity Hospital in New Orleans first emphasized this point in 1894.[4] In 1939 Baxter reported 224 cases in colored races.[5] By 1950 reports by Imler and Underwood, Muelling[7] and Burdette bring the total number in American Negroes to 158. By the same period, Morris and Horn collected from the literature 280 cases in African Negroes.[4]

Report of Case

A 73 year old Negro female was seen for the first time in Homer G. Phillips Hospital in June 1954 for a small tumor mass on the scalp. It was excised and the pathology report read: skin—malignant melanoma.

In 1956 another small mass was seen under the right arm and it was also reported as malignant melanoma. A new mass appeared in January 1959 on the left lateral aspect of the neck and was also proved to be a malignant melanoma.

The fourth admission was in December 1959 for a malignant melanoma of the rectum. The patient related a history of intermittent rectal bleeding for about three months prior to admission. A change in bowel habit consisted in constipation necessitating occasional laxatives. Tenesmus occurred with increasing frequency. There was no weight loss.

Physical examination revealed a well nourished, well developed, 73 year old woman, who was slightly obese. Aside for the small tumor mass on the right arm which was proved to be a malignant melanoma, the only other significant findings was on rectal examination. A large 6 by 8 cm. irregular, firm mass was palpated at about 4 cm. above the anal margin, on the anterior wall of the rectum. It was mobile and bled easily.

A wedge biopsy was taken through an anoscope under general anesthetic and was reported as malignant melanoma. Except for an anemia of 7 gm. per cent of hemoglobin the laboratory findings were not remarkable. Melanin test of the urine was positive.

The patient was then scheduled for an abdominal perineal resection, probably only as palliation. As a left rectus incision was made from the pubis up to 3 cm. above the umbilicus, several small moderately firm, black nodules were found in the subcutaneous fat. The abdominal cavity contained about 500 cc. of amber colored fluid. Exploration of the abdominal cavity revealed the liver to have several hard nodular implants on the surface with a firm, irregular mass about 5 cm. in diameter in the region of the porta-hepatis. The pelvic cavity was studded with dark moderately firm nodules measuring from 0.5 cm. to 3 cm. in diameter. The small bowel as well as the large bowel also contained nodules from 0.5 to 2 cm. in diameter, some were subserosal, some intramural, but none were seen protruding into the intestinal lumen. Dozens of tiny nodules were also found in the omentum and mesenteries. In view of the wide spread metastasis a sigmoid colostomy was performed.

As pointed out by Braastad et al., the prognosis of this lesion is uniformly poor regardless of the therapy employed. They found reports of cures in only three instances in 94 cases.[4]

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YOUR CONGRESSMAN

In a report issued by Mr. Tom Curtis, Representative of the 2nd District of Missouri, he has the following to say about medical aid for the aged:

"A great deal has been written about this subject. What has not been written is what was said on the Floor of the House during the debate on the amendments to the Social Security Bill of 1960. I want to give the gist of what I said.

"I pointed out that everything in the bill except for the subject of medical aid to the aged was the result of the unanimous report of the subcommittee on social security of the Ways and Means Committee which had conducted extensive studies in 1959. I am the ranking minority member of this subcommittee. The subcommittee had been instructed, in effect, not to go into the question of medical care for the aged. The reason was this: in 1958, the Congress passed the Fogarty Resolution directing the President to go into the question of all aspects of the problems of the aged . . . not just health. Accordingly, the White House Conference for the Aged was set up. Studies are being made. This conference meets in January, 1961, to go over its material to make its recommendations.

"Our subcommittee had not gone into this subject, nor did the full Committee of Ways and Means. The Ways and Means Committee sat in executive session for over two months discussing the subject, but our discussions were based upon incomplete knowledge and no attempt was made to get the information we needed to legislate intelligently on the subject.

"Why could the House pass a bill which contained provisions relating to an important subject like health care for the aged when no studies had been made? The answer is simple, but shocking. Because a powerful political pressure group, the national leaders of the AFL-CIO, demanded it.

"I am convinced that this kind of legislating can result only in bad laws and in overall bad government.

"Those who are advocating attaching a program of health care for the aged onto the Social Security OASDI program in lieu of the OAA program must realize that it would be a complete reversal of the basic philosophy that created the OASDI program in the beginning. OAA is the old age assistance program. It is a federal-state matching program run by the states. The 'needs' test is applied and any old person on OAA has his or her budget prepared by the social worker—so much for food, so much for rent, so much for recreation, etc. This method was felt to be degrading and by substituting the OASDI (old age security and disability 'insurance' program) for it the needs test would be eliminated. People would pay into the OASDI fund during their working years. Putting health costs onto OASDI is a step backward to the OAA budgeting process. The old person receives OASDI benefits in cash, but on health costs the federal government would have to do the budgeting. I made the point that if the old people needed more assistance for health costs it would be better to make a cash increase in their Social Security benefit payments and leave to them how they would budget themselves.

"Some advancement has been made this year in the field of health for the aged. Tax credit

(Continued on page 1158)

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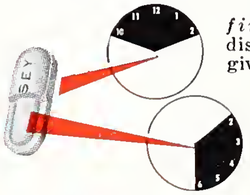

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E. VINCENT ASKEY, M.D., *Los Angeles, Calif.*

Address of the A.M.A. President-Elect

A Special Article

Dr. Askey, now President of the American Medical Association, in his address to the House of Delegates of the American Medical Association as President-Elect discussed five fields in which he felt concerted effort is needed: medical education, White House Conference on Aging, voluntary health insurance and related problem of third party relationships, membership and mental health.

Mr. Speaker, Members and Guests of the House of Delegates:

Today I should like to call attention to a few specific areas which I believe demand careful study and concerted effort by the entire profession.

First, however, I want to pay sincere, personal tribute to my predecessor, Dr. Louis M. Orr. During the last year he has carried out his presidential duties with great energy and dedication. He has been a forceful, articulate spokesman for American medicine, recognized not only by his colleagues but by the public as a whole. I hope that I can come reasonably close to the quality of leadership provided by Dr. Orr.

As we now look at the year and the decade ahead, I strongly urge intensified, accelerated effort in five particular fields: (1) medical education, (2) preparations for the White House Conference on Aging, (3) voluntary health insurance and the related problem of third party relationships, (4) membership, and (5) mental health.

Medical Education

First the subject of medical education. I want to emphasize the need for constructive planning to meet this nation's future needs in medical manpower. Although opinions and statistical estimates vary widely on the exact requirements, there is general agreement that we must bring about a steady increase in the annual number of medical school graduates during the times ahead.

Our population is increasing rapidly. The dimensions of medical knowledge are constantly changing. Medical services are becoming more and more complex. And perhaps most important, the American people are showing greater and greater interest in health and medical needs.

Cognizant of all these factors, this House of Delegates, in December 1958, adopted a clear policy statement urging existing medical schools to consider the possibility of expanding their facilities and enrollments. It also encouraged the creation of new four-year medical schools and also two-year basic science programs by universities which can provide the proper academic and clinical setting. This expansion, it added, should be based upon careful, continuing study of changing needs in medical services.

One year ago in Atlantic City—recognizing the recruitment problems which already exist, and which will increase with future expansions in medical education—you asked the Board of Trustees to consider the possibility of establishing a program of medical scholarships to be sponsored wholly or in part by the American Medical Association.

Meanwhile, during the last year, the A.M.A. in cooperation with the Association of American Medical Colleges has developed a program for the recruitment of qualified, dedicated young people into the study of medicine. To further this program, we have produced a kit of comprehensive materials including a handbook, pamphlets and speeches in addition to exhibits and a new motion picture. Six months ago, at the Dallas meeting, this House urged medical societies and individual physicians to implement the recruitment program.

At the same time, following up on the action of last June, you also approved the creation of a special study committee to "present a scholarship program, its development, administration and the role of the American Medical Association in fulfilling it." The committee also was directed to investigate seven other major questions related to the expansion, establishment, staffing and financing of medical schools.

The special study committee was appointed in

January, began its staff work in February and held its first meeting early in March. In accordance with your instructions in Dallas, the committee will present its initial progress report at this meeting.

With respect to this whole picture in medical education—expansion, recruitment, scholarships and loan funds—I should like to make the following suggestions:

1. Medical societies, medical schools and individual physicians should make the fullest possible use of the recruitment materials now available from the A.M.A. They also should make the availability of these materials known to vocational guidance counsellors, voluntary health agencies, community and civic groups, and all other potentially interested organizations.

2. The entire profession—through information, ideas and suggestions—should give full, enthusiastic cooperation to all aspects of the special study committee's work, which has only just begun.

3. State and county medical societies should establish the closest possible liaison with the medical schools located in their own states or communities. Only through solid, mutual understanding can medical educators and practicing physicians provide the sound leadership required in this problem of expansion. Some medical educators are active, interested participants in the affairs of our profession. Unfortunately, however, too many medical teachers have a serious lack of knowledge concerning the objectives, motivations and accomplishments of the American Medical Association. In my opinion, one of our top priorities should go to the task of educating the educators, and bringing about closer rapport between actively practicing physicians and medical faculties.

4. On all levels—national, state and local—let's tell our positive story to service organizations, civic groups and the general public. In short, let's bury—once and for all—the false old fable that the A.M.A. tries in any way to restrict the supply of physicians.

White House Conference on Aging

On the subject of aging and health care for the aged, I do not intend to discuss the Forand Bill, the Flemming proposal, or the generally confused legislative situation concerning medical care in Washington. Nor do I intend to report on the Association's over-all activities in the field of aging during the last year. You already have received ample information on those aspects of the subject.

Rather, I want to focus attention on one particular phase of this issue. It calls for a lot of hard work and greatly intensified effort during the next six months—especially on the state and local level. I refer to preparations for the White House Conference on Aging, to be held next January.

You will recall that the American Medical Association strongly supported the legislation passed by the 85th Congress, providing for the national meeting and state conferences to precede it. We stated then, and we still maintain, that it is necessary to learn the facts and the nature of a problem in order to arrive at sound, intelligent solutions. A balanced perspective in the field of aging will reveal the fallacies underlying some of the hit-or-miss legislative proposals aimed in the general direction of health care for the aged.

Since 1958, much of the Association's activity in this field has been designed to stimulate effective participation by medicine in state and local activities related to the 1961 White House Conference on Aging. Through regional conferences, special meetings, liaison efforts and various other mechanisms, we have been striving for two major objectives:

1. To stimulate a public climate of opinion conducive to support of medicine's position in the field of aging.

2. To alert, inform and stimulate state medical associations to action regarding the White House Conference.

In pursuit of these objectives, the Association in late April 1960 held a National Conference on Medicine's Participation in the White House Conference on Aging. This meeting was attended by 100 persons, including representatives of 46 constituent medical societies. It provided information and thorough discussion of the various developments and problems related to pre-conference activities now under way on the state and local level.

I urge you to see that you make full use of all facts, reports and suggestions emanating from that April meeting in Chicago.

Some of the state conferences, preliminary to the White House Conference, already have been held. Others will be taking place at various times between now and January. It is imperative that medicine take an active, articulate part in these state conferences and other planning activities prior to the national meeting.

According to my latest information, the medical profession in at least 16 states is in a very favorable position to contribute to the state's report and to provide the necessary leadership among those state's delegation to the White House Conference. However, in too many other states there is the possibility that a report unfavorable to medicine's position will be presented in January by these state delegations.

Therefore, I strongly urge you and your state societies to do everything possible to make medicine's opinions known and represented.

Health Insurance and Third Parties

With respect to health insurance, the Association's goal is to accelerate the growth and improvement of voluntary coverage for all Americans of all ages. As a significant new step in that direction, the A.M.A. last month sponsored its first National Congress on Prepaid Health Insurance in Chicago. It was attended by 200 representatives of more than 30 national organizations involved in prepayment and insurance programs. The purpose of this highly successful meeting was to see where we now stand, what we have to do in the future, and how we might go about doing it.

The Association has been widely commended for this demonstration of leadership in the field of voluntary health insurance. For example, the *New York Times*—which is not always in complete agreement with medicine's viewpoints—said in a recent editorial:

"The American Medical Association deserves credit for its statesmanship in staging its conference in Chicago on health insurance plans . . . at Chicago a supreme and successful effort was made to get all those involved in health insurance on an even keel, with mutual understanding as to the course to steer by."

We hope that this May conference has laid a foundation for even greater progress in the prepayment field than has been made during the past decade. I personally urge you to act favorably and enthusiastically upon any recommendations which may come before you concerning the development of a future program for national and regional conferences on health insurance.

Closely related to the subject of health insurance is the whole question of medicine's relationships with the so-called third parties involved in medical economics. In accordance with your action last June on the recommendations of the Commission on Medical Care Plans, our Council of Medical Service is working to perfect a set of "Guides" for the medical profession in dealing with third parties. It is my understanding that these guides will be presented for your approval at the clinical meeting in December.

Meanwhile, I urge every state and county medical society to review once again the recommendations of the Commission on Medical Care Plans, as adopted and revised at the Atlantic City and Dallas meetings. Many of those recommendations suggested constructive activities to improve liaison and understanding on the state and local level. I urge that they be implemented now with all possible speed and vigor. Any third party which is trying to do a medically sound job in the field of health care should be numbered among our friends and allies.

Membership

In connection with A.M.A. membership, I want to stress two points in very brief fashion.

First, I think there is definite need for improving the Association's relations and communications with its members. Much work has been done along these lines in recent years, but I feel that we should expand and strengthen it. While it is necessary to establish a favorable image of the A.M.A. in the minds of the general public, it is equally important to establish an even stronger image in the minds of our own members.

Second, although A.M.A. membership has been increasing steadily every year, we should direct closer attention to the thousands of physicians who are not now members of the Association. In some states the numbers of such physicians seem to be disproportionate. I urge all state and county societies to study their membership requirements. Their objective, I think, should be to eliminate any eligibility rules which may prevent otherwise-qualified physicians from joining county and state societies and the American Medical Association.

Mental Health

Concerning mental illness and health, I must urge upon you the great need we have in our country as a whole, and in our profession particularly, to make greater efforts toward alleviation of our apparently ever-growing problem of mental illness. Possibly the ratio of such patients is not increasing, but certainly our increasing awareness of the great numbers of persons so affected makes the problem of their proper care and treatment more urgent each year. But about mental illness, we as doctors know a great deal, and, although I am sorry to have to say this, I feel certain that we are not applying our present effective knowledge to the extent we could. We recognize that there is always some lag between growth of new knowledge and its application. But, I believe that in the field of mental illness this lag is now greater than in any other medical field.

Our Council on Mental Health, which was first formed in 1952, has been making great strides toward the reintegration of psychiatry within the whole framework of medicine. The basic knowledge and principles of psychiatry must be emphasized throughout medicine as working tools that all doctors need to know about, and utilize in practice. This should, and must, be our continuing goal.

Further, I would like to bring to your attention the fact that the three and one half year study of mental illness and health in the United States which was undertaken by the "Joint Commission on Mental Illness and Health," has now been completed. The Joint Commission's report will appear in ten monographs plus a final summary report, all due this year. The monographs cover problems of economics, manpower, available community resources, epidemiology, problems of mental illness in schools, religion and mental health, and a complete resurvey of mental hospital practices.

Finally, in this same field, but in a much larger and broader sense—indeed, in a world sense—I believe that, as doctors, we all have a greater responsibility, not to people as patients, but to people as people.

It is in this larger world sense then, during my forthcoming year as President of our Association, that I would like to dedicate myself and my work toward finding solutions to this problem, that is seemingly becoming a recognized threat to our health, to our happiness, to our civilization.

I sincerely hope you too will recognize this challenge and dedicate yourselves and your county and state medical societies to the task of meeting it.

KANSAS CITY SOUTHWEST CLINICAL SOCIETY FALL CONFERENCE

This fall, for the first time, the Annual Fall Clinical Conference of the Kansas City Southwest Clinical Society, will be held at Hotel Muehlebach. The dates for the sessions at the Hotel are October 3-5. This change in locale has been made for the comfort and convenience of physicians since it will enable them to attend the scientific meetings, breakfast and luncheon sessions, and view the exhibits within the same building and in a compact area.

On the morning of October 6 a Hospital Workshop program has been arranged for presentation at five Greater Kansas City Hospitals. This workshop program will offer an opportunity for informal discussion and, wherever possible, for actual participation by those attending. The subjects of these workshops are "Everyday Surgery of the Face," "Diseases of the Lung," "Evaluation of Liver Function and Differential Diagnosis of Jaundice," "Radioactive Isotopes in the Diagnosis of Thyroid Disease," and "Examination of the Eye in Physical Diagnosis."

In addition to general assembly lectures each morning, a series of symposia and panel discussions will make up the major portion of the daily sessions at the Hotel. Among the symposia topics are "Cardiovascular Disease," "The Importance of Splenectomy," "Renal Disease," "Infectious Disease," and the "Biochemistry of Disease." Panel discussions will close each symposium and others will be presented on the subjects of "Far Advanced Carcinoma of the Breast and Its Management," "Common Nonmalignant Diseases of the Colon," "Eclampsia—A Preventable Disease," and "The Anatomy of a Lawsuit."

Daily postgraduate breakfast seminars will provide an opportunity for those interested in the informal "seminar" type discussion to select subjects of special appeal to them. Several "specialty" luncheons each day will be offered for small groups interested in a particular subject.

Fifteen distinguished guest speakers will be featured in this 1960 program. The Edward Holman Skinner Memorial Lecture will be delivered by Sir Harry Platt of Manchester, England, the immediate Past President of the Royal College of Surgeons. He will speak on the topic, "Whither Medicine?" Other guest physicians are: John W. Berry, internist, St. Louis; Matthew Block, hematologist, Denver; Lewis L. Coriell, pediatrician, Camden, New Jersey; Oscar Creech, Jr., surgeon, New Orleans; R. H. Flocks, urologist, Iowa City; A. James French, pathologist, Ann Arbor, Michigan; Arthur Grollman, internist, Dallas; Charles A. Hunter, Jr., gynecologist, Indianapolis; George R. Meneely, internist, Nashville, Tennessee; Henry I. Russek, cardiologist, Staten Island, New York; John R. Walsh, internist, Omaha; Kenneth W. Warren, surgeon, Boston; Henry L. Williams, otolaryngologist, Rochester, Minnesota; Robert E. Wise, radiologist, Boston.

All physicians who are members of their county medical societies are cordially invited to at-

(Continued on page 1172)

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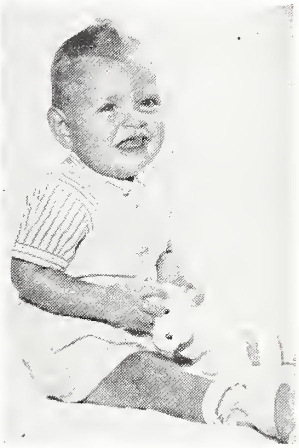

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R. O. Muether, M.D.

President's Message

The primaries are past and it is hoped that every physician exercised his right of freedom to vote according to his convictions. The national election is still in the future but many grass root situations, which have a far reaching effect, are settled in the primaries.

This time between the two elections may be a key time in the national legislative story. There are several bills that the reconvened Congress may consider further and it is necessary that a close watch be kept on the activities of the Congress and that Congressmen be contacted on legislation that affects the public and the medical profession.

This is true of both legislation to which the A.M.A. and the majority of physicians are opposed, and that which is favored.

The trite saying that we are in politics whether we wish it or not is true, not only in elections but all the time that Congress is in session—and in between sessions when Congressmen may be contacted in their home communities.

R. O. Muether M.D.

EDITORIALS

MEDICAL RESEARCH

National spending on medical research, which will reach a record of $715,000,000 this year, is about eight times higher today than in 1947, according to a report in a late issue of *Patterns of Disease.*

Chiefly responsible for the sharp rise in funds for medical research is the federal government which has increased its contribution from $28,000,000 in 1947 to $305,000,000 in 1959. Once a relatively small supporter of medical research, the government now gives more money than all other sources combined.

Support from other sources also has increased. Last year, the pharmaceutical industry spent $190,000,000 on research and development, a figure 50 per cent more than in 1957. Of the amount spent in 1959, $174,700,000 was for research and development within the companies and $15,300,000 for research outside the companies. In addition, the pharmaceutical industry allocated $5,950,000 in 1959 for unrestricted gifts and grants to schools and hospitals and $2,000,000 for contributions to organizations, such as the National Fund for Medical Education, which support medical and related schools.

Also, contributions by foundations, health agencies and other private philanthropies have increased. During the 1947-1959 period, allocations for medical research rose from $25,000,000 to $90,000,000.

Most of the money goes to universities, medical schools, research institutes and hospitals. Last year their share of available research funds was 49 per cent compared to industry's 32 per cent and the government's 19 per cent.

In 1957, 64 per cent of funds for medical research received by universities, hospitals and other academic institutes came from the federal government, 31 per cent from private sources and 5 per cent from industry.

Appropriations for the National Institutes of Health indicate that the top three priorities for research funds are cancer, with $91,257,000 allocated, mental health with $68,090,000, and heart conditions with $62,237,000.

In the pharmaceutical industry, statistics on tests conducted point to a greater emphasis on research in allergy and infectious diseases. Of a total of 114,600 compounds and substances tested for medical research purposes during 1958, 50,300 or 44 per cent were concerned with allergy and infectious diseases. Substances tested for cancer research numbered 28,000; and mental health, neurological diseases and blindness accounted for 12,100 tests.

It is pointed out that relatively few of the thousands of substances tested by pharmaceutical companies get beyond the laboratories. It is stated that "During 1958, an average of 60 substances was prepared and biologically tested to obtain just one drug suitable for clinical investigation."

In the academic world, the biosciences claim top priority for research funds. Statistics cited by *Patterns of Disease* show that of grants distributed to academic institutions, 45.6 per cent goes toward research into the biosciences compared with 21.3 per cent for clinical specialties and 15.0 per cent for general medicine.

Most of the grant-type support received by academic institutions is directed toward basic research in the physical and life sciences. One survey showed that about two thirds of available funds were spent on basic research and another survey showed that medical schools devoted almost four fifths of research funds to basic research.

Growing recognition of the vital importance of basic research is reflected in the rapid increase in recent years of grants made by the National Science Foundation, the only federal agency that is committed solely to basic research. In 1958, grants amounting to $10,881,130 were awarded by the Foundation for biologic and medical research, compared with $762,675 in 1952.

Personnel for medical research is becoming insufficient as money becomes available for the research. It is estimated that approximately 20,000 professional research workers are currently engaged in medical research. *Patterns of Disease* estimates that an additional 25,000 scientists will be needed by 1970 if projected expansion of research is to be achieved, with present training facilities sufficient to provide 19,000.

While there is the shortage of personnel for medical research, there still is felt to be a shortage of clinical practitioners. The change in the trend of medical school graduates going into research work is shown by comparison of surveys showing an increase from 2.3 per cent some years ago compared to 8 per cent of medical school graduates currently entering the field of medical research.

Both medical research and the practicing physician are necessary.

Ramblings of the Field Secretary

One hundred physicians attended the symposium on Clinical Medicine and Surgery sponsored by the Southwest Missouri Chapter of the Missouri Academy of General Practice and the Greene County Medical Society in cooperation with Lederle Laboratories at the Holiday Inn, Springfield, Sunday, June 26.

The session began with a luncheon which was attended by most of the physicians registered and many wives. The luncheon chairman was Dr. W. W. Tillman, Jr., President of the Greene County Medical Society. Following his welcoming remarks, Dr. Tillman introduced those at the head table and other special guests. He then introduced the luncheon speaker, Edward M. Litin, M.D., Consultant, Section of Psychiatry, Mayo Clinic, Rochester, who spoke on "The Spoiled Brat—The Problem Parent."

Moderators McNew and Tillman stand behind the speakers.

There was a good attendance.

The afternoon scientific session began at 2:00 p.m. and closed at 5:30 p.m. The moderator for this part of the program was Dr. William T. McNew, Carthage, President, Southwest Missouri Chapter of the Missouri Academy of General Practice. The afternoon speakers included E. Newton Hesbacher, M.D., The Foss Clinic, Danville, Pennsylvania; John P. Utz, M.D., National Institutes of Health, Bethesda, Md.; Goodrich C. Schauffler, M.D., Associate Clinical Professor of Obstetrics and Gynecology, University of Oregon Medical School, Portland, Oregon; William Requarth, M.D., Clinical Assistant Professor of Surgery, University of Illinois College of Medicine, Chicago, Illinois.

Following 30 minute formal presentations of specific subjects by the four speakers, a one hour panel discussion was held when questions were discussed by the speakers as presented from the audience. Time permitted the answering of only a part of the questions submitted. This would seem to indicate much interest on the part of the audience in the formal discussions as presented.

Dr. Litin was the luncheon speaker.

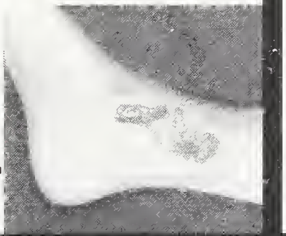
While the doctors were enjoying the afternoon scientific session, the wives were being entertained through a special program developed by the Woman's Auxiliary of the Greene County Medical Society.

This symposium on Clinical Medicine and Surgery was acceptable for four hours of Category I Credit by the American Academy of General Practice. It was noted that some of the officers of both the Missouri Academy of General Practice and the Missouri State Medical Association were present for this session. They were P. C. Hall, M.D., St. Louis, President of the Missouri Academy, and Cecil Leitch, M.D., Blue Springs, President-Elect of the Academy, and J. H. Summers, M.D., Lebanon, President-

(Continued on page 1154)

FORCE INJURY

severe bruises ... swelling ... cleared by fifth day[2]

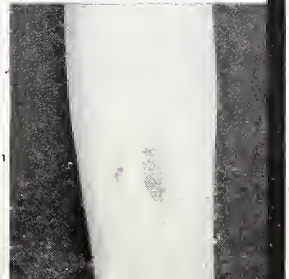


VARICOSE ULCER

15 years duration ... resolved with VARIDASE[1]

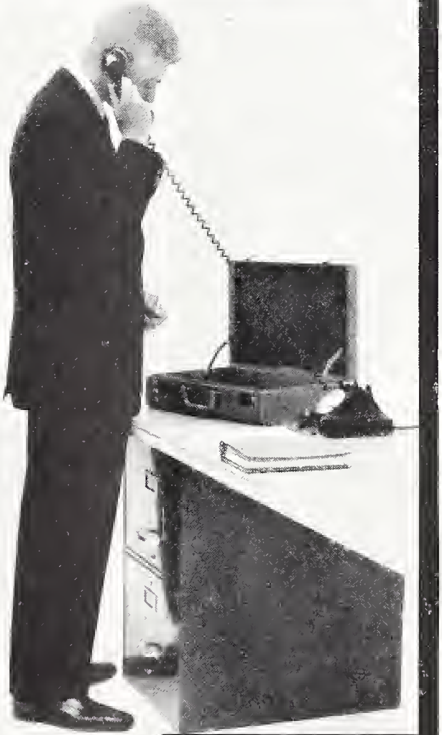
INFLAMMATORY DERMATOSIS

rapidly spreading rhus dermatitis healed within a week[1]



INFECTED LACERATION

arked reversal in 3 days ... returned to school ... sure advanced[1]



THROMBOPHLEBITIS

back on his feet in a week after recurrent episode[1]

REFRACTORY CELLULITIS

normal routine resumed after 4 days of VARIDASE[1]

Elect of the Missouri State Medical Association.

It is a long way from Missouri to Miami Beach, Fla., but nevertheless, a good representation of Missouri doctors was there to attend the June meeting of the A.M.A. Missouri's four Delegates, namely; Durward Hall, M.D., Springfield; Richard Kiene, M.D., Kansas City; A. W. Neilson, M.D., St. Louis, and H. E. Petersen, M.D., St. Joseph, attended all sessions of the A.M.A. House of Delegates and spent many additional long hours in reference committee hearings. Guy B. Magness, M.D., University City, and Rolla Wray, M.D., Nevada, Alternate Delegates from Missouri, along with Dr. R. O. Muether, St. Louis, President of the State Medical Association, and J. H. Summers, Lebanon, President-Elect, sat in on the deliberations of the House of Delegates and various reference committees.

Missouri delegates were busy at the A.M.A. House of Delegates.

The delegates caucused with the President and President-Elect.

All sessions of the House were held at the Americana Hotel. The technical and scientific exhibits were housed in the auditorium with the scientific meetings scattered around somewhat. As usual, most of the reference committee meetings were well attended, particularly those at which controversial issues were under consideration. As is usually the case, the real discussions and decisions are made in the reference committee hearings.

The delegates took time out for a picture.

The next session of the A.M.A. House of Delegates will be held in Washington, D. C., this coming December, as the interim session meeting.

DEATHS

Kouri, Martin F., M.D., St. Louis, a graduate of Washington University School of Medicine, 1906; member of St. Louis Medical Society; aged 79; died July 10.

Keith, Willis E., M.D., Kansas City, a graduate of the University of Illinois, 1907; member of Jackson County Medical Society; aged 79; died July 11.

Sweaney, Isaac F., M.D., Oregon, a graduate of the University of Tennessee, 1950; member of Nodaway County Medical Society; aged 41; died July 18.

Roden, J. S., M.D., Columbia, a graduate of the University of Texas, 1945; member of Boone County Medical Society; aged 43; died July 26.

Davis, Harry H., M.D., Rolla, a graduate of the University of Arkansas School of Medicine, 1937; member of Mid-Missouri Medical Society; aged 60; died June 6.

Lawrence, John V., M.D., St. Louis, a graduate of the University of Chicago, 1924; member of St. Louis Medical Society; aged 67; died June 12.

Thompson, Ralph L., M.D., St. Louis, a graduate of Harvard Medical School, 1900; member of St. Louis Medical Society; aged 87; died June 22.

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the acute
asthmatic
attack **elixir synophylate®**
(Theophylline Sodium Glycinate)

**RAPID ORAL CONTROL
WITHOUT G.I. IRRITATION**

ELIXIR SYNOPHYLATE relieves wheezing and dyspnea in 5 to 10 minutes after a single dose. Significant blood levels are achieved in 15 minutes, persisting for at least 4 hours.

Because of its built-in buffer, theophylline sodium glycinate [SYNOPHYLATE] is "tolerated in larger doses than are possible with other theophylline preparations,"[1] including aminophylline.[1-3]

the most potent theophylline elixir available . . . may avoid need for I.V. injection

1. A.M.A. Council on Drugs: New and Nonofficial Drugs 1959, Philadelphia, Lippincott, 1959, p. 389. 2. United States Dispensatory (Osol-Farrar), ed. 25, Philadelphia, Lippincott, 1955, p. 1412. 3. Grollman, A.: Pharmacology and Therapeutics, ed. 3, Philadelphia, Lea & Febiger, 1958, p. 208.

Each tablespoonful (15 ml.) contains 0.33 Gm. (5 gr.) equivalent to 0.16 Gm. (2½ gr.) Theophylline U.S.P.
Supplied: Bottles of 1 pint and 1 gallon.

Literature on request.

. . . particularly useful for children

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THE CENTRAL PHARMACAL COMPANY Seymour, Indiana

News—Personal and Professional

"Heart," was the subject of a talk presented by **M. Donald McFarland,** M.D., Kansas City, before a group from St. Paul's Episcopal Church of Kansas City.

The Kansas City Urological Society elected **James F. O'Malley,** M.D., president; **C. Laurence Johnson,** M.D., vice president, and **Milton B. Ozar,** M.D., secretary-treasurer.

The University of Kansas Medical School presented 50 year pins to **Oliver S. Gilliland,** M.D., and **Raymond E. Teall,** M.D., Kansas City, at the 1960 graduating exercises.

Recently, **Robert L. Jackson,** M.D., Columbia, was appointed vice chairman of the Council on Foods and Nutrition of the American Medical Association.

At a meeting of the staff of the St. Louis County Hospital held in July, **E. Lee Dorsett,** M.D., St. Louis, was elected president, and **Robert C. Kingsland,** M.D., St. Louis, was elected chief of staff.

The W. Scott Johnson Award, award of the Missouri Public Health Association, was presented to **Carl E. Rice,** M.D., Hillsboro, at a meeting of the association in Jefferson City.

A seminar for x-ray technicians held at the Burge-Protestant Hospital in Springfield was addressed by **W. W. Tillman,** M.D., Springfield.

"Your Medical Center at the University of Missouri" was the subject of a radio program recently in which **Vernon E. Wilson,** M.D., and **Gwilym S. Lodwick,** M.D., took part.

The Phi Gamma Delta social fraternity recently honored **Claude J. Hunt,** M.D., Kansas City, for 50 years of membership.

The Kansas City Blue Shield has elected **Gerald Miller,** M.D., Kansas City, as secretary.

At the First International Congress in Endocrinology, held in Copenhagen, Denmark, in July, **Albert B. Eisenstein,** M.D., St. Louis, presented an address.

The Willard O. Thompson Memorial Award for distinguished contributions to geriatric medicine was presented to **William B. Kountz,** M.D., St. Louis, by the American Geriatrics Society.

Principal speaker at a graduation dinner of the St. Louis College of Pharmacy was **Jerome I. Simon,** M.D., St. Louis.

The luncheon speaker at a workshop for workers for cerebral palsied children held at Columbia was **Orr Mullinax,** M.D., Marshall.

Hospital nuns and former students recently honored **LeRoy M. Sante,** M.D., St. Louis, at St. Mary's Hospital, St. Louis. He was presented a plaque in recognition of his 41 years of service to the hospital order.

A testimonial dinner was given for **Leo A. Will,** M.D., St. Louis, upon his retirement as chief of staff of the St. Louis County Hospital.

The Distinguished Alumnus Award of Wheaton College, Wheaton, Ill., was presented to **Everett D. Sugarbaker,** M.D., Jefferson City, by the school's alumni association.

The Central Chapter of the Society of Nuclear Medicine has elected **George E. Thoma,** M.D., St. Louis, president.

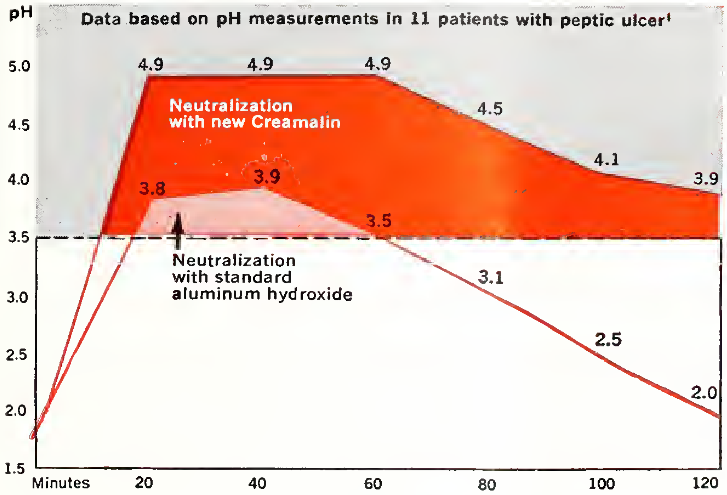
The American Neurological Association has elected **James L. O'Leary,** M.D., St. Louis, as its president-elect.

Two papers were presented by **Claude J. Hunt,** M.D., Kansas City, at the meeting of the International College of Surgeons at its meeting in Rome, Italy.

A history of the 54 year old Southern Medical Association, written by Mr. C. P. Loranz, Birmingham, was due off the press in mid-August.

At the site of peptic ulcer

Following determination of basal secretion, intragastric pH was continuously determined by means of frequent readings over a two-hour period.



neutralization is much faster and twice as long with

New CREAMALIN® ANTACID TABLETS

New proof in vivo[1] of the much greater efficacy of new Creamalin tablets over standard aluminum hydroxide has now been obtained. Results of comparative tests on patients with peptic ulcer, measured by an intragastric pH electrode, show that new Creamalin neutralizes acid from 40 to 65 per cent faster than the standard preparation. This neutralization (pH 3.5 or above) is maintained for approximately one hour longer.

New Creamalin provides virtually the same effects as a liquid antacid[2] with the convenience of a tablet.

Nonconstipating and pleasant-tasting, new Creamalin antacid tablets will not produce "acid rebound" or alkalosis.

Each new Creamalin antacid tablet contains 320 mg. of specially processed, highly reactive, short polymer dried aluminum hydroxide gel (stabilized with hexitol) with 75 mg. of magnesium hydroxide. Minute particles of the powder offer a vastly increased surface area for quicker and more complete acid neutralization.

Dosage: Gastric hyperacidity — from 2 to 4 tablets as necessary. Peptic ulcer or gastritis — from 2 to 4 tablets every two to four hours. Tablets may be chewed, swallowed whole with water or milk, or allowed to dissolve in the mouth. **How supplied:** Bottles of 50, 100, 200 and 1000.

1. Data in the files of the Department of Medical Research, Winthrop Laboratories. **2.** Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: **J. Am. Pharm. A.** (Scient. Ed.) 48:384, July, 1959.

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Councilor Distrct News

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Greene County Medical Society

A regular meeting of the Greene County Medical Society was held Friday, June 24, at the Holiday Inn, Springfield, with 48 members and five guests present.

The minutes announced that the society had been asked to assist in obtaining physicians to conduct entrance examinations at Boy Scout Camp Arrowhead at Marshfield for Sunday, July 10, 1960 and Sunday, July 24, 1960.

President Tillman reminded the members of the Sunday, June 26, Symposium on Clinical Medicine and Surgery jointly sponsored by the Greene County Medical Society, the Southwest Missouri Chapter of the American Academy of General Practice and the Educational Services Department of Lederle Laboratories. All members were urged to attend.

Dr. Howard J. McAlhany, a member of the Program Committee, presented Edgar J. Berger, M.D., Medical Director of the St. Louis Labor Health Institute, who discussed, "What Labor Feels Is Necessary for Medical Care of Its Members and of the Aged With Particular Reference to the St. Louis Health Institute."

Dr. Tillman expressed appreciation to Dr. Berger for his excellent presentation and for making the appearance before the society.

There being no further business, the meeting was adjourned.

F. T. H'Doubler, Jr., M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler, Ripley, Wayne County Medical Society

The Butler, Ripley, Wayne County Medical Society met at the Northwold Restaurant, Poplar Bluff, for a dinner meeting on June 21, 1960.

A fine attendance was present at this meeting. Dr. T. E. Ruff of Poplar Bluff, spoke on "Office Urology." There were many questions and much interest shown in the question and answer period following the lecture.

E. T. Hansbrough, M.D., *Secretary*

MISSOURI SOCIETY OF MEDICAL TECHNOLOGISTS

The Missouri Society of Medical Technologists will present a fall meeting program on October 22, 23, at Hotel Missouri, Jefferson City, Missouri. The program follows:

Saturday Afternoon, October 22

Presiding: Mrs. L'Nora Wells, MT(ASCP), M.A., President-Elect, Columbia, Missouri.
1:30 p.m. Registration—Coffee.
2:00 p.m. Invocation.
2:10 p.m. Greetings from Cole County Medical Society, Fred Handler, M.D.
2:20 p.m. Hemoglobinopathies, H. O. Loyd, M.D.
2:50 p.m. Focusing on Fine Points in Cell Identification, Sister Mary Leo Rita, S.S.M. MT-(ASCP) M.S.
3:20 p.m. Exchange Transfusions, John S. Sennott, M.D.
3:50 p.m. Reiter Protein Complement Fixation Test, Mrs. Verne Ekstam, MT(ASCP).
Adjourn.
5:45 p.m. Social Hour followed by Dinner
Hostesses, Mrs. John Knollmeyer, MT-(ASCP) and Committee
Toastmaster, J. I. Matthews, M.D.
Guest Speaker, Mrs. Marie Carr, MT-(ASCP), M.A.: Highlights of the 4th International Congress on Clinical Chemistry in Edinburgh, Scotland.

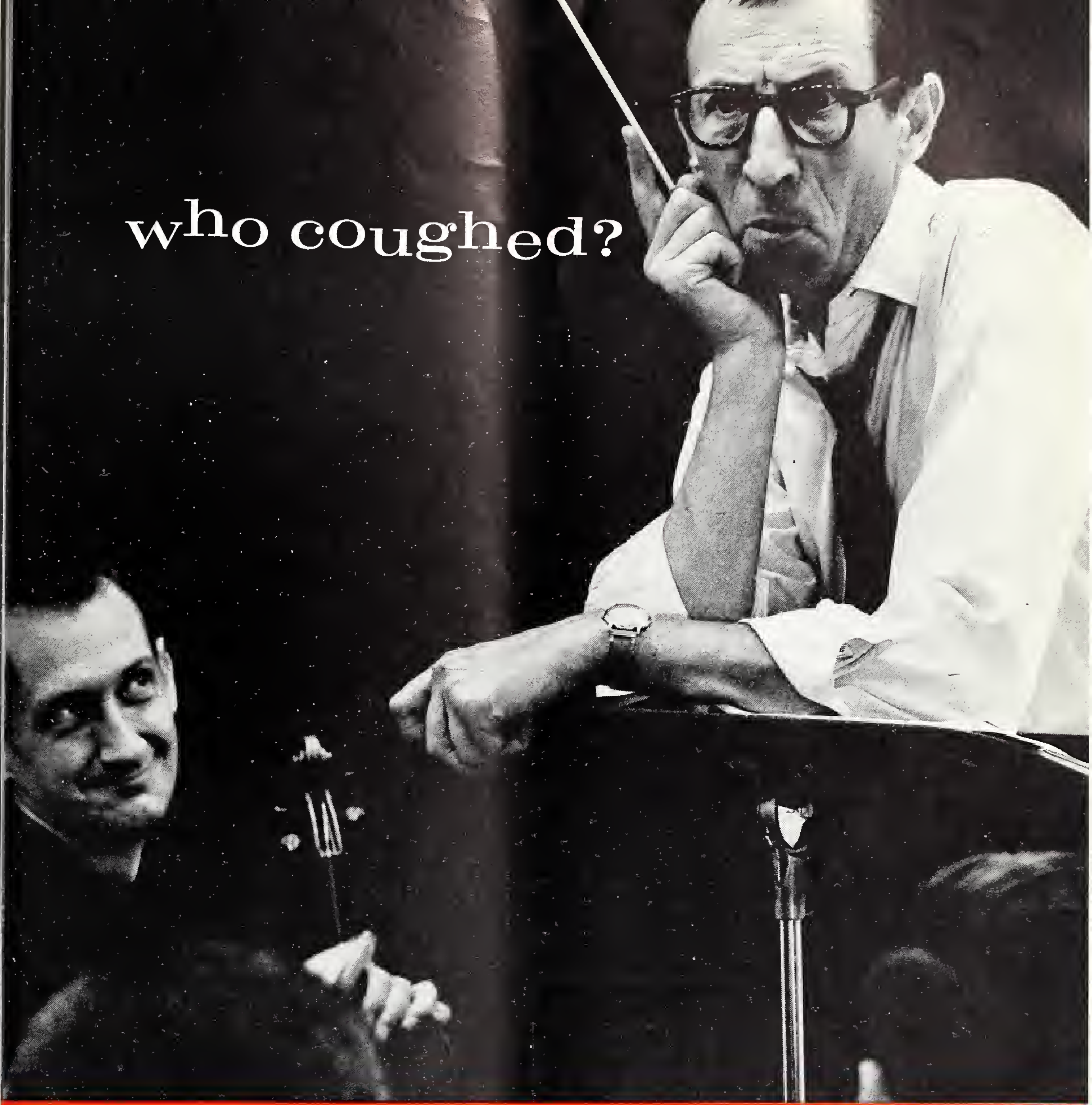
Sunday, October 23

8:30 a.m. Breakfast Board Meeting
9:15 a.m. Business Meeting—Coffee
Presiding: Sister Martin Mary, S.S.M., MT(ASCP), M.S.
10:45 a.m. Staphylococcal Problem in Small Hospitals, Fred Handler, M.D.
11:15 a.m. What's New in Medicine, J. I. Matthews, M.D.
11:45 a.m. Experiences with the Spinco Ultramicro Analytical System, Doris Clark, MT-(ASCP), B.S.
12:15 p.m. Sunday Buffet
1:30 p.m. A Matter of Fact (Film).
2:00 p.m. Verbal Anesthesia for Veno Puncture, Vincent L. Eberle, M.D.
2:30 p.m. Quality Control in Clinical Chemistry, Joyce Torrey, MT(ASCP).

YOUR CONGRESSMAN

(Continued from page 1141)

for medical expenses for the aged borne by their children has now been provided. Last year's Act, to extend FHA guarantees for safe and healthy new private nursing homes, which I sponsored, has gone into operation. I told the House that the older people needed health facilities and new financing technics, particularly health insurance, more than anything else, and we should be concentrating our efforts in these areas if we really wished to help the older people."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cough sedative / antihistamine
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- relieves cough and associated symptoms in 15-20 minutes ▪ effective for 6 hours or longer ▪ promotes expectoration ▪ rarely constipates ▪ agreeably cherry-flavored

Each teaspoonful (5 cc.) of HYCOMINE* Syrup contains:

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Dihydrocodeinone Bitartrate (Warning: May be habit-forming)	5 mg.	6.5 mg.
Homatropine Methylbromide	1.5 mg.	
Pyrilamine Maleate		12.5 mg.
Phenylephrine Hydrochloride		10 mg.
Ammonium Chloride		60 mg.
Sodium Citrate		85 mg.

Average adult dose: One teaspoonful after meals and at bedtime. May be habit-forming. Federal law permits oral prescription.

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Literature on request
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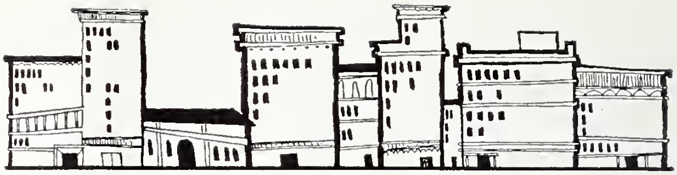
From the Medical Schools



WASHINGTON UNIVERSITY

Clinical Research Center

Washington University School of Medicine has received $338,780 from the United States Public Health Service for the establishment of a Clinical Research Center in the Barnard Free Skin and Cancer Hospital. Funds represent the first year's payment of a grant renewable yearly for five years. The Washington University Center will be one of the first established by the Public Health Service under a directive of the 1960 Congress which allocated $3 million to initiate a new program of grants for "therapeutic and metabolic research units." Eight such centers are being established in various parts of the United States.

Dr. David M. Kipnis, assistant professor and Markle Scholar in Medicine, has been named director of the Washington University Center, which will occupy the fourth floor of the five story Barnard Hospital at 660 South Kingshighway. The new research facilities will permit Medical School investigators to correlate their non clinical laboratory studies with carefully controlled clinical observations in the center. Patients will be admitted by approval of the director on the request of an investigator in any of the Medical School departments. In addition to cancer, studies will be made on patients with metabolic and nutritional diseases and on a wide variety of other patients.

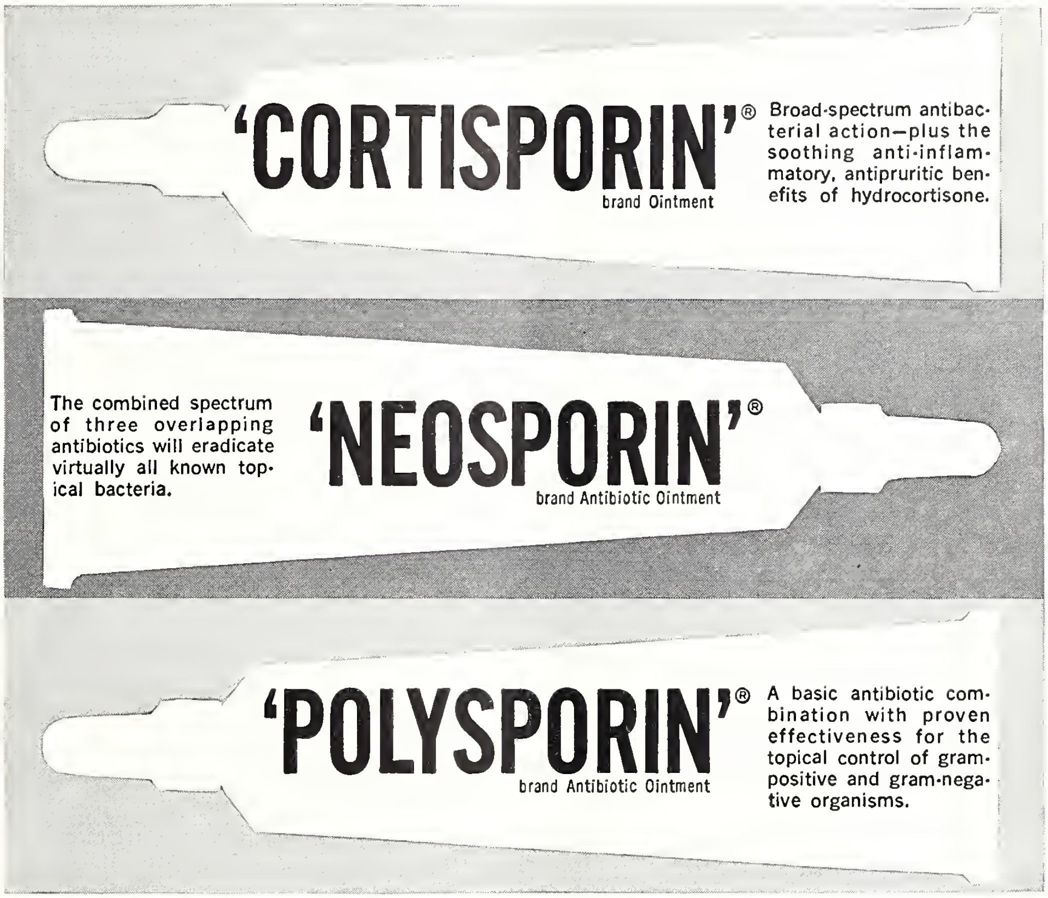
Barnard Hospital will continue to concentrate its services on the care and treatment of cancer and skin diseases. However, by terms of his will, Mr. Barnard enabled the hospital to broaden its services to permit more extensive medical research in cancer and other fields. Funds provided by the grant cover remodeling, equipping and air conditioning the center; the hospitalization costs of patients; salaries of the director, dietitians, nurses, orderlies and secretary and the cost of drugs and x-rays used in treatment. Specially trained nursing and dietetic staffs will be provided. There will be specialized laboratory facilities and a metabolism kitchen.

Assisting Dr. Kipnis in the administration of the new center are an advisory committee composed of Dr. William Newton, instructor and American Cancer Society Advanced Clinical Fellow in surgery; Dr. Hulda Wohltmann, assistant professor of pediatrics; Dr. Alfred I. Sherman, associate professor of obstetrics and gynecology, and Dr. Paul Lacy, assistant professor of pathology. Dr. Kipnis received his medical training at Johns Hopkins University; the University of Maryland School of Medicine, and at Duke Hospital. He came to Washington University in 1955 to work under Dr. Carl Cori, head of the department of biochemistry, as an American College of Physicians Research Fellow. He became a Markle Scholar in July of 1956 and was appointed assistant professor of medicine in 1957. Organized in 1905 as the St. Louis Skin and Cancer Hospital, a new building at 3427 Washington Avenue was made possible in 1910 by a gift from George D. Barnard. Barnard Free Skin and Cancer Hospital is affiliated with Washington University and built a new building in the Medical Center in 1954.

Foundation Honored

An inscribed plaque to front the Washington University Child Psychiatry Building was recently dedicated to the Children's Research Foundation. The plaque, presented by Dean Edward W. Dempsey and Dr. E. James Anthony, Blanche F. Ittleson, professor and head of the division of child psychiatry, honored the Foundation for its role in the development of the Child Guidance and the Child Evaluation Clinics. Both are located in the Child Psychiatry Building, which was the former Mission Free School. Representing the Foundation was Mr. Alvin A. Wolff, president, and members of the board. The Child Guidance Clinic for emotionally disturbed children, which was reorganized on a permanent basis in 1949, was established by the Children's Research Foundation with the combined functions of teaching, research and service in child guidance work. It is now a United Fund Agency. The Child Evaluation Clinic was begun in 1956 by the Children's Research Foundation and the St. Louis Association for Retarded Children as a diagnostic and therapeutic center for mentally retarded children. Both clinics are incorporated in the William Greenleaf Eliot Division of Child Psychiatry which was established in 1958.

'B. W. & Co.' 'Sporin' Ointments rarely sensitize . . . give decisive bactericidal action for most every topical indication



'CORTISPORIN'® brand Ointment

Broad-spectrum antibacterial action—plus the soothing anti-inflammatory, antipruritic benefits of hydrocortisone.

'NEOSPORIN'® brand Antibiotic Ointment

The combined spectrum of three overlapping antibiotics will eradicate virtually all known topical bacteria.

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A basic antibiotic combination with proven effectiveness for the topical control of gram-positive and gram-negative organisms.

Contents per Gm.	'Polysporin'®	'Neosporin'®	'Cortisporin'®
'Aerosporin'® brand Polymyxin B Sulfate	10,000 Units	5,000 Units	5,000 Units
Zinc Bacitracin	500 Units	400 Units	400 Units
Neomycin Sulfate	—	5 mg.	5 mg.
Hydrocortisone	—	—	10 mg.
Supplied:	Tubes of 1 oz., ½ oz. and ⅛ oz. (with ophthalmic tip)	Tubes of 1 oz., ½ oz. and ⅛ oz. (with ophthalmic tip)	Tubes of ½ oz. and ⅛ oz. (with ophthalmic tip)

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Honorary Degree

Dr. Mildred Trotter, professor of anatomy at Washington University School of Medicine, received an honorary degree at Mount Holyoke College, South Hadley, Mass., during 1960 commencement exercises. Dr. Trotter, an authority in hair and skeletal research, has taught at Washington University since 1920. She received her undergraduate degree at Mount Holyoke. In 1957, Dr. Trotter became the first woman to receive the Viking Fund medal awarded by the Wenner-Gren Foundation for Anthropological Research. She is president of the Missouri State Anatomical Board.

Bequest, Grants

Three staff members have been awarded postdoctoral fellowships for research in heart disease next year by the Life Insurance Medical Research Fund of New York. The awards will go to Dr. Ara M. Charvardjian and Dr. Joe W. Grisham, both for study with Dr. W. S. Hartroft at Washington University School of Medicine, and to Dr. Gordon Newton, for study at the Institute of Physiology, University of Aarhus, Denmark. The Life Insurance Medical Research Fund, organized in 1945, devotes its resources to fighting heart disease.

The fund awarded 69 grants and fellowships for 1960-1961. Research grants totaling $30,546 have been awarded to three staff members of Washington University School of Medicine by the United States Public Health Service.

Hiromichi T. Narahara, public health service special research fellow in biological chemistry, received $12,272 to study the effect of insulin on muscle tissue.

A $10,876 grant to Dr. Valentina Suntzeff, research associate professor emeritus and lecturer in cancer, will support an investigation of specific changes in the intestinal tract during aging.

Dr. Philip G. Ackermann, research assistant professor of gerontology, was awarded $7,498 to study the amounts of free amino acids in young and older adults. The research will aid in the determination of special protein requirements for older people.

A bequest of $20,000 was left to the Beaumont-May Institute of Neurology at Washington University School of Medicine by Mrs. May Goldman Rice under the terms of her will, filed in Probate Court. Mrs. Rice, St. Louis civic and cultural leader, died June 14 at Holland, Michigan en route to her summer home at Charlevoix, Mich. The widow of Charles M. Rice, prominent St. Louis attorney, she was 77 years old.

UNIVERSITY OF MISSOURI

Research Colleagues Meet

The Research Colleagues met Tuesday, July 19, in the Post Graduate Lounge at 7:30 p.m. "Medical Research by Persons Not Holding Master's or Ph.D. Degrees" was the major topic for discussion with Dr. Vernon E. Wilson as discussion leader.

The Colleagues discussed the training for research the medical student has or can obtain, and from there they went on to the ways training is done at the University of Missouri for research, and which ways are the best ones. From this point the question was posed, what is medical research. There seemed to be two types, the colleagues found, clinical and experimental. Laboratory hours were then discussed, how many the medical students have, and whether or not they are put to the best use. It was noted that at the School of Medicine, students can obtain research fellowships for either the summer months or a year's period, devoting their entire time to studying.

Refreshments were served later in the evening. Topics for discussion at the next meeting might be "What Are the Best Ways to Teach Research Methods," and "What Is Research?"

Graduation Ceremonies for Practical Nurses

Fifteen practical nurses received their pins and diplomas June 10, at the graduation ceremonies in the School of Medicine Auditorium. Mr. Merton Wheeler, State Director of Trade and Industrial Education, Jefferson City, gave the Graduation Address. Miss Georgeann Larson, Supervisor Instructor, presented the pins and diplomas and Mr. Ray Walsh, Director of the Columbia Public School of Practical Nurses, co-ordinator, welcomed the group. Mrs. Freda Moore was valedictorian, and Miss Marva Brown was chosen by the head nurses and faculty members as most outstanding student.

A Capping Ceremony was held in the Auditorium June 24, for fourteen practical nurses. Dr. Gwilym Lodwick, the main speaker, talked about the relationship nursing has had with the hospital. Mr. Walsh delivered the welcome and Miss Larson capped the students. A reception was held in the Post Graduate Lounge after the ceremony.

Heart Attack Fatal to Dr. Roden

Dr. Jacob S. Roden, professor of obstetrics and gynecology and Chairman of the Department, died at 7:45 p.m., July 26, in the Medical Center Hospital.

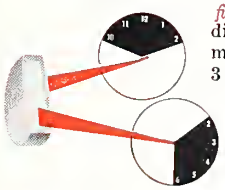
"I wouldn't be hooting all night if I were able to get my beak on some TRIAMINIC® to clear up my stuffed sinuses."

...and for humans with STUFFED-UP SINUSES...

Your patient with sinus congestion doesn't give a hoot about anything but prompt relief. And TRIAMINIC has a pharmacologically balanced formula designed to give him just that. As soon as he swallows the tablet, the medication is transported *systemically* to *all* nasal and paranasal membranes – reaching inaccessible sinus cavities where drops and sprays can never penetrate. TRIAMINIC thereby brings more complete, more effective relief without hazards of topical therapy, such as ciliary inhibition, rebound congestion, and "nose drop addiction."

Indications: nasal and paranasal congestion, sinusitis, postnasal drip, upper respiratory allergy.

Relief is prompt and prolonged because of this special timed-release action:



first—the outer layer dissolves within minutes to produce 3 to 4 hours of relief

then—the core disintegrates to give 3 to 4 *more* hours of relief

Each Triaminic timed-release Tablet provides:

Phenylpropanolamine HCl	50 mg.
Pheniramine maleate	25 mg.
Pyrilamine maleate	25 mg.

Dosage: 1 tablet in the morning, midafternoon and at bedtime. In postnasal drip, 1 tablet at bedtime is usually sufficient.

Each timed-release Triaminic Juvelet® provides:
½ the formulation of the Triaminic Tablet.
Dosage: 1 Juvelet in the morning, midafternoon and at bedtime.

Each tsp. (5 ml.) of Triaminic Syrup provides:
¼ the formulation of the Triaminic Tablet.
Dosage (to be administered every 3 or 4 hours):
Adults – 1 or 2 tsp.; *Children 6 to 12* – 1 tsp.;
Children 1 to 6 – ½ tsp.; *Children under 1* – ¼ tsp.

TRIAMINIC® *timed-release tablets, juvelets, and syrup*

STOP *running noses* *and open stuffed noses orally*

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Dr. Roden was struck by a heart attack in the elevator at 7:30 p.m. after returning from an evening meal in the Medical Center cafeteria. He was rushed to the fourth floor of the hospital, but died at 7:45 in spite of the efforts of the physicians.

Dr. Weiss to Present Two Papers

James M. A. Weiss, M.D., associate professor and acting Chairman of the Department of Psychiatry, presented two papers at the Fifth Congress of the International Association of Gerontology, in San Francisco, August 7 through 12, 1960.

Dr. Weiss presented "Symptom Formation Among Older Patients in Psychiatric Clinic Population," to the section on Clinical Medicine: Psychiatry on Tuesday, August 9.

The paper summarized a series of studies investigating the nature and type of mental health problems presented by older out-patients attending a metropolitan psychiatric clinic. The report basically relates the behavior of complaining in older patients to age, sex and diagnosis, as well as to medical, social and psychologic variables.

"Predicting the Psychiatric Problems of Older Persons: A Follow-Up Study," was presented by Dr. Weiss to the section on Mental Health and Rehabilitation Thursday, August 11. The paper, written by Dr. Weiss with Barbara A. Barney, M.S., and J. Marcia Jones, M.S., students at the School of Social Work, University of Missouri, working under the supervision of Dr. Weiss, reports the findings from an original Psychiatric Evaluation Index (PEI), developed for the purpose of investigation of the evaluation of 30 non-institutional older patients. The PEI was administered to the patients in 1957 and again in 1959 for comparisons of the patterns of behavior over the two year period.

White House Conference on Aging

Dr. Vernon E. Wilson, Dean of the School of Medicine and Director of the Medical Center, presented a report of Task Force 17, July 6, at the State Conference of the Missouri Committee for the 1961 White House Conference on Aging, at the Memorial Student Union.

Dr. Addison M. Duval, clinical professor of psychiatry, and Director of the State Division of Mental Diseases, and Dr. James M. A. Weiss, associate professor and acting Chairman of the Department of Psychiatry, were both speakers at the White House Conference on Aging, July 6-7. Dr. Duval was leader of a workshop on mental health and Dr. Weiss presented a report

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was obtained in 32 of the 75 patients studied.

rationale:

The clinicians note that impairment in hearing, disturbance in balance, and tinnitus involving the inner ear "may be explained on the basis of labyrinthine artery insufficiency" due to spasm or obstruction of the vessels. Arlidin was found to be "superior to all other vasodilating measures" in increasing blood flow through these vessels and in allaying spasm.

on "The Role and Training of Professional Personnel" and participated in a workshop discussion of the same topic.

Dr. Wilson also attended the state Committee meeting of the White House Conference on Aging which was held on July 21, in Jefferson City.

Grant for Electron Microscope

The Board of Curators of the University of Missouri has accepted the offer of a grant from the National Science Foundation in the amount of $45,300.00 for the purchase and installation of an electron microscope for interdisciplinary research use under the direction of Dr. J. C. Thaemert, assistant professor of anatomy.

Dr. Thaemert visited the Department of Anatomy, Washington University, St. Louis, from June 27 to July 1, working in the electron microscope laboratory with Dr. Duncan Chicquoine.

Pathology

Dr. Joseph E. Flynn, professor of pathology and Chairman of the Department, and Dr. Fred Lucas, professor of pathology, attended a Board of Directors meeting of the Leukemia Guild in St. Louis, June 29, 1960. An audience of twelve were present.

Dr. Ira D. Godwin, instructor in pathology, attended an Auto Analyzer Training Course sponsored by the Technicon Corporation, June 6 through June 10. An approximate audience of 40, including physicians, Ph.D. bacteriologists, biochemists, and medical technicians attended the meeting. Dr. Godwin reports that it was an "excellent course on basic theory and operation of the Technicon Auto Analyzer."

Radiology

Dr. G. S. Lodwick, Chairman of the Department of Radiology, and Associate Dean of the School of Medicine, attended a board of directors meeting of the Leukemia Guild in St. Louis, June 29. He gave a brief talk on radiation, its hazards and its uses in medicine to a group of junior high school students who visited the Department. He also spoke on practical nursing education at the capping ceremony for practical nurses.

Faculty Appointments in the Department of Surgery

The following faculty appointments were approved July 1, 1960 at a meeting in the Medical Center.

Dr. Egil T. Dingsor appointed as third year

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1. Rubin, W., and Anderson, J. R.: Angiology 9:256, 1958.

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resident, assistant instructor in surgery, section of urology. Dr. Dingsor is from Norway.

Dr. Ezra R. Singer appointed as second year resident, assistant instructor in surgery.

Dr. Samuel H. Gray appointed as first year resident, assistant instructor in surgery.

Dr. Gerard J. Voelkers, appointed as first year resident, assistant instructor in surgery.

Dr. Jong-In Kim, from the Missouri Baptist Hospital, St. Louis, appointed for six months as assistant instructor in surgery.

Dr. Loszlo Kovacsi, Ann Arbor, Michigan, appointed as fifth year resident, instructor in surgery, section of urology.

Dr. Ralph Bender, from the Veterans Administration Hospital, St. Louis, appointed as third year resident, assistant instructor in surgery, section of orthopedics.

Dr. Garth Russell appointed as research associate in surgery, section of ophthalmology.

Dr. John C. Schuder, from Trevrose, Pennsylvania, assumed his duty as research associate professor of surgery (Electrical Engineering), July 1, in the Department of Surgery.

Dr. Thompson Speaks

Dr. Ian M. Thompson, associate professor of surgery (urology), gave a presentation of a paper on "Exstrophy of the Bladder" at the Canadian Urological Association in Banff, Canada. He also attended the American Urological Western Section meeting in Vancouver, British Columbia, Canada, June 19.

Publications

Dr. James M. A. Weiss, associate professor of Psychiatry and acting Chairman of the Department, and Drs. J. W. Lamberti and M. Blackman, have published a paper entitled "The Sudden Murderer: A Comparative Analysis," in the AMA *Archives of General Psychiatry*, June, 1960. Drs. Lamberti and Blackman are affiliated with Washington University School of Medicine in St. Louis.

Dr. Weiss was also one of several contributors to the publication, "Residential Treatment for Emotionally Disturbed Children," in *Missouri's Children and Youth*, 1950-1960, a publication of the Missouri Committee for the 1960 White House Conference on Children and Youth, Jefferson City.

ST. LOUIS UNIVERSITY

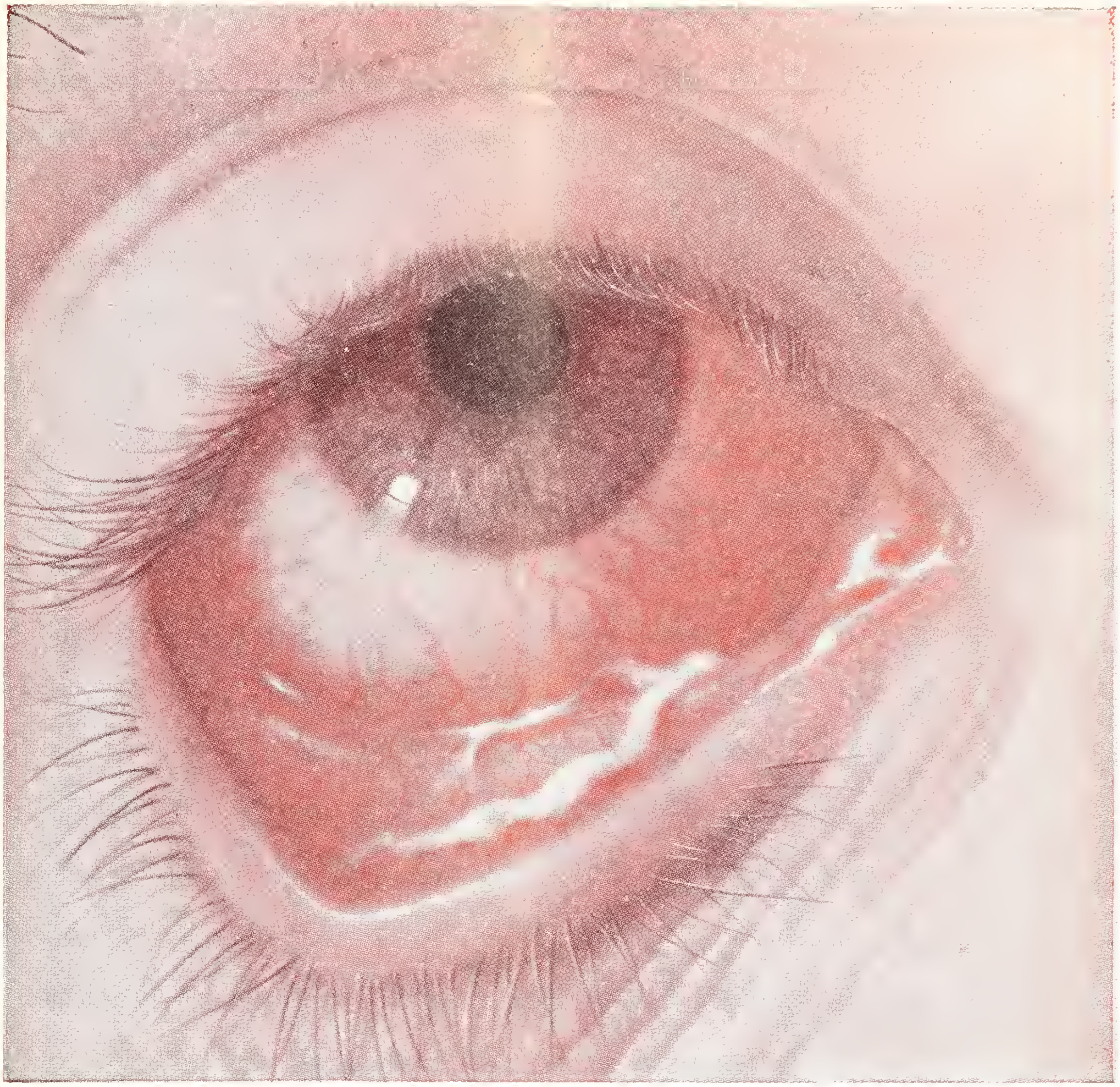
Groundbreaking ceremonies marking the construction of the $1,344,000 David P. Wohl Health Institute were held July 8 at the site of the Old Battery A Armory, Grand Avenue and Rutger, which has since been razed preparatory to the start of the construction of the hospital.

Mrs. David P. Wohl, whose late husband contributed $500,000 toward construction of the 60 bed hospital participated in the ceremony. Matching funds for the Institute have come from the Hill-Burton program for Missouri.

Ground breaking ceremonies for the new David P. Wohl Health Institute in the St. Louis University Medical Center were held July 8. Assisting Mrs. Wohl are the Very Rev. Paul C. Reinert, S.J., president of St. Louis University, and Dr. James W. Colbert, Jr., dean of the School of Medicine. Site of the new building will be the old Battery A Armory at Grand Avenue and Rutger Street. Prior to construction of the new building, the Armory will be razed.

Others who took part in the groundbreaking ceremony were the Very Rev. Paul C. Reinert, S.J., president of the University; Dr. James W. Colbert, Jr., dean of the School of Medicine, members of the board of directors of the Wohl Foundation, representatives of the Hill-Burton Authority and University administrators.

Hellmuth, Obata and Kassabaum, Inc., were architects for the building which features five open, landscaped courtyards in the square block area to be occupied by the hospital. The Institute will receive its supplies, food, steam and laboratory work from nearby Firmin Desloge Hospital, the School of Medicine's main teaching hospital. It will be staffed by the School of Medicine.



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1. Lippmann, O.: Arch. Ophth. **57**:339, March 1957
2. Gordon, D.M.: Am. J. Ophth. **46**:740, November 1958.

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Promotions

Twenty-eight faculty promotions in the School of Medicine, effective September 1, have been announced by the Very Rev. Paul C. Reinert, S.J., president of the University.

Medical faculty in the order of their new ranks are as follows: Dr. Don C. Weir, associate professor to professor of clinical radiology; Dr. Irving A. Coret, assistant professor to associate professor of pharmacology; Dr. Maurice Green, assistant professor to associate professor of microbiology; Dr. Harold L. Segal, assistant professor to associate professor of pharmacology; Dr. Jackson K. Eto, assistant professor to associate professor of clinical pediatrics; Dr. Jack Zuckner, assistant professor to associate professor of clinical medicine; Dr. Archibald M. Ahern, senior instructor to assistant professor of clinical medicine; Dr. Armand Brodeur, senior instructor to assistant professor of clinical radiology; Dr. George E. Gantner, Jr., senior instructor to assistant professor of pathology; Dr. John T. Matschiner, senior instructor to assistant professor of biochemistry; Dr. Jiro Nakano, instructor to assistant professor in medicine; Dr. Hubert A. Ritter, instructor to assistant professor of clinical gynecology and obstetrics; Dr. Jerome T. Y. Shen, senior instructor to assistant professor of clinical pediatrics; Dr. James F. Sullivan, senior instructor to assistant professor of clinical medicine; Dr. George E. Thoma, senior instructor to assistant professor of clinical medicine; Dr. Matt H. Backer, Jr., instructor to senior instructor in gynecology and obstetrics; Dr. Donald Bindbeutel, instructor to senior instructor in surgery; Dr. John J. Budd, instructor to senior instructor in internal medicine; Dr. Carlo Caciolo, instructor to senior instructor in internal medicine; Dr. James L. Donahoe, instructor to senior instructor in pediatrics; Dr. Eugene H. Ebel, Jr., instructor to senior instructor in pediatrics; Dr. William T. Fitzgerald, instructor to senior instructor in internal medicine; Dr. John W. Fries, instructor to senior instructor in radiology; Dr. Sidney Goldenberg, instructor to senior instructor in internal medicine; Dr. Robert L. Korn, instructor to senior instructor in pediatrics; Dr. Richard Mamiya, instructor to senior instructor in surgery; Dr. Robert H. Ramsey, instructor to senior instructor in internal medicine, and Dr. James C. Redington, instructor to senior instructor in internal medicine.

Summer Research

Four School of Medicine scientists were engaged in summer research investigations on the East Coast. Dr. R. Walter Schlesinger, director of the department of microbiology and Dr. Thomas M. Stevens, instructor in microbiology spent two months at the Mount Desert Island Biological Laboratory at Salisbury Cove, Maine. They engaged in a study of the effect of several viruses and viral nucleic acids on the early embryonic development of the sand dollar, a sea urchin.

Drs. Schlesinger and Stevens also screened a number of marine animals for substances which can be degraded by the enzyme associated with human influenza viruses. Such substances are commonly found in tissues and secretions of man and various animals. Their presence in marine animals may offer an opportunity for the study of viruses in primitive forms of life. Edward J. Miller, a summer research fellow, worked with Drs. Schlesinger and Stevens.

Dr. Morton M. Weber, assistant professor of microbiology at the University, spent the months of July and August as a collaborating visiting scientist with the Brookhaven Laboratories, a subsidiary of the Atomic Energy Commission. The laboratories are located at Uptown, Long Island, New York. Dr. Weber was a research associate of Dr. Myron Levine of the Brookhaven National Laboratories. They conducted research on the effect of respiratory enzymes of host cells on bacteriophage infections.

Dr. Norman E. Melechen, assistant professor of microbiology, conducted studies at the Long Island Biological Association at Cold Spring Harbor, Long Island, New York. Working with Dr. Melechen was David G. Kamp, a summer research fellow. They worked with a culture of sewer germs in seeking more information on latent virus infections.

Interns

Forty of the 97 recent graduates of the School of Medicine, nineteen of whom are from the State of Missouri, started internships at hospitals in St. Louis July 1. Thirteen of the graduates are from the Greater St. Louis area.

Postgraduate Course

The School of Medicine presented a summer postgraduate course on the Medical Aspects of Radiological Health for Public Health Officials July 11 to September 9. Sponsored and supported by the Division of Radiological Health of the Public Health Service, U. S. Department of Health, Education and Welfare, the course was directed by Dr. George E. Thoma, Jr., assistant professor of internal medicine and director, Section of Nuclear Medicine at the School of Medicine.

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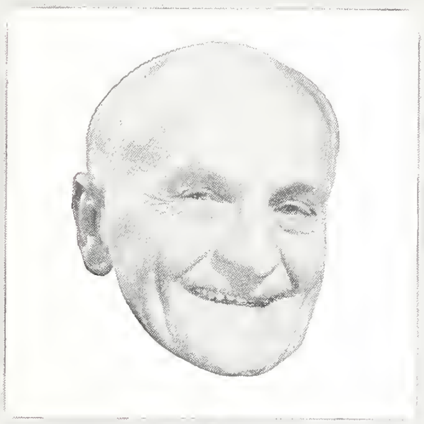
all age groups



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The intensive full time course included seminars, field trips, lectures by sixteen nuclear scientists and course instruction by the University's Section of Nuclear Medicine with the cooperation of other School of Medicine departments, the department of dental roentgenology and the department of physics of the College of Arts and Sciences.

Course instruction was conducted at Firmin Desloge Hospital, the main teaching hospital of the School of Medicine. Laboratory work was conducted in the Section of Nuclear Medicine's teaching laboratory with lectures presented in Miller Hall of the Hospitals.

Guest scientists, all of whom spent a day or more at the University were: Dr. Richard Chamberlain, University of Pennsylvania; Mr. Samuel D. Estep, University of Michigan; Dr. Louis Hemplemann, University of Rochester; Dr. G. S. Hurst, Oak Ridge National Laboratory; Dr. Wright Langham, Los Alamos Scientific Laboratory; Mr. J. R. Mason, Atomic Energy Commission; Dr. Karl Z. Morgan, Oak Ridge National Laboratory; Dr. Russell Morgan, Johns Hopkins University; Colonel John Pickering, Aerospace Medical Center, Brooks Air Force Base, Texas; Dr. Eugene Saenger, University of Cincinnati; Dr. Conrad Straub, Public Health Service, Cincinnati; Dr. Lauriston Taylor, National Bureau

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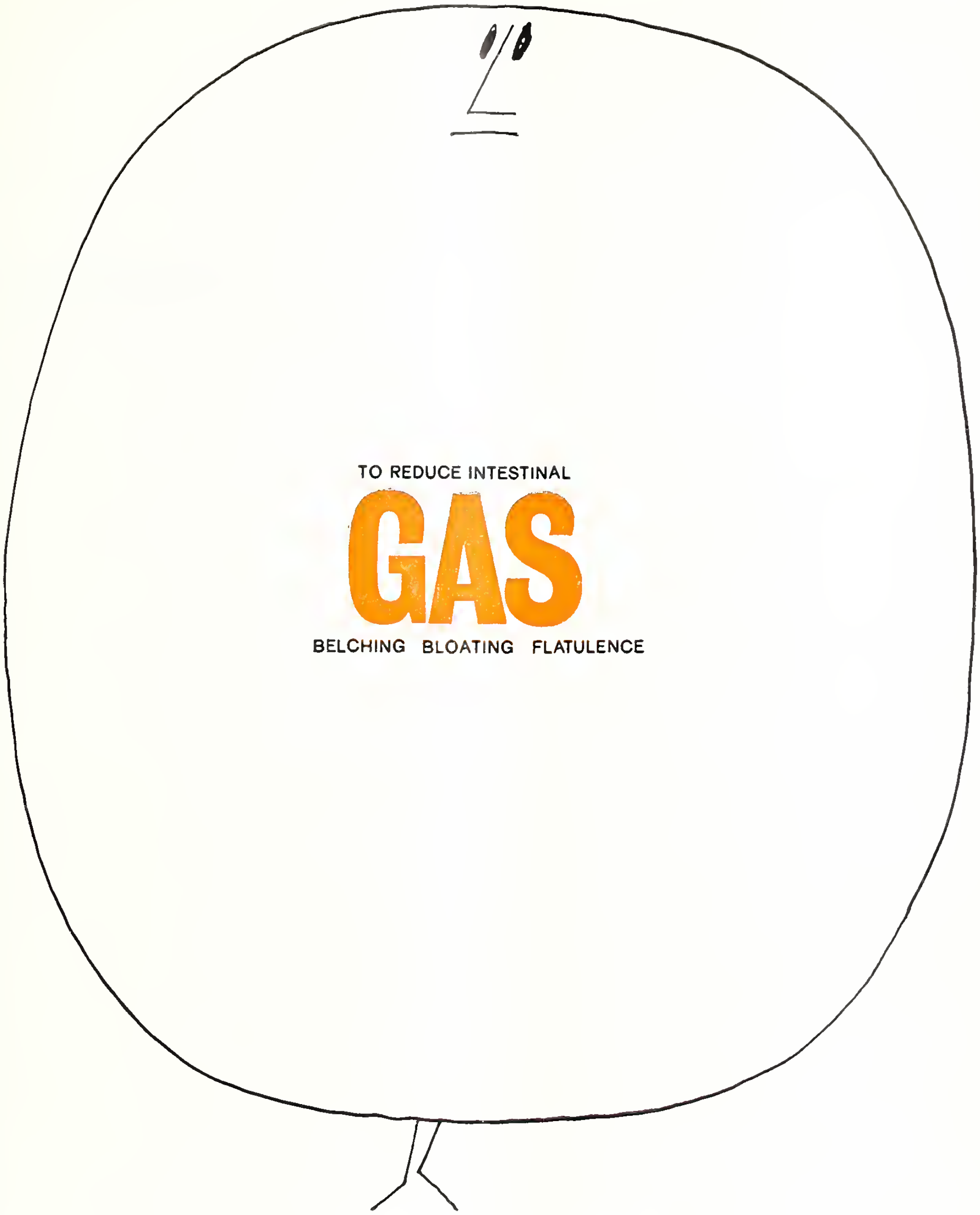
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of Standards, Washington; Mr. James Terrill, Public Health Service, Washington; Dr. Niel Wald, University of Pittsburgh; Dr. Francis J. Weber, Public Health Service, Washington and Dr. Nathan Woodruff, Atomic Energy Commission, Washington. The course was scheduled to conclude at the University on September 2 and reconvene at the Oak Ridge National Laboratory from September 6 to 9 for field training.

NEW MEMBERS

Curtis U. Franklin, M.D., 2462 Brooklyn, Kansas City, has become a member of the Jackson County Medical Society. Dr. Franklin is a native of Texas, received his preliminary education in Tennessee, and his M.D. degree from the College of Medicine, Howard University, in 1953. He served a residency at Homer G. Phillips Hospital in St. Louis.

Robert L. Goolsbee, M.D., 3001 W. 48th St. Terrace, Kansas City, has become a member of the Jackson County Medical Society. Dr. Goolsbee is a native of Texas, received his preliminary education in Texas and his M.D. degree from the University of Texas Medical Branch in 1955.

Ben Koon, M.D., 108 N. Main, Bolivar, has become a member of the Dallas-Hickory-Polk County Medical Society. Dr. Koon is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from the University of Pennsylvania in 1956.

Arthur G. Petersen, M.D., Plaza Time Bldg., Kansas City, has become a member of the Jackson County Medical Society. Dr. Petersen is a native of Nebraska, received his preliminary education in Kansas, and his M.D. degree from the University of Kansas School of Medicine in 1954.

Carlos G. Santoro, M.D., 1222 McGee Street, Kansas City, has become a member of the Jackson County Medical Society. Dr. Santoro is a native of Porto Rico, received his preliminary education in New York, and his M.D. degree from Tulane Medical School in 1952.

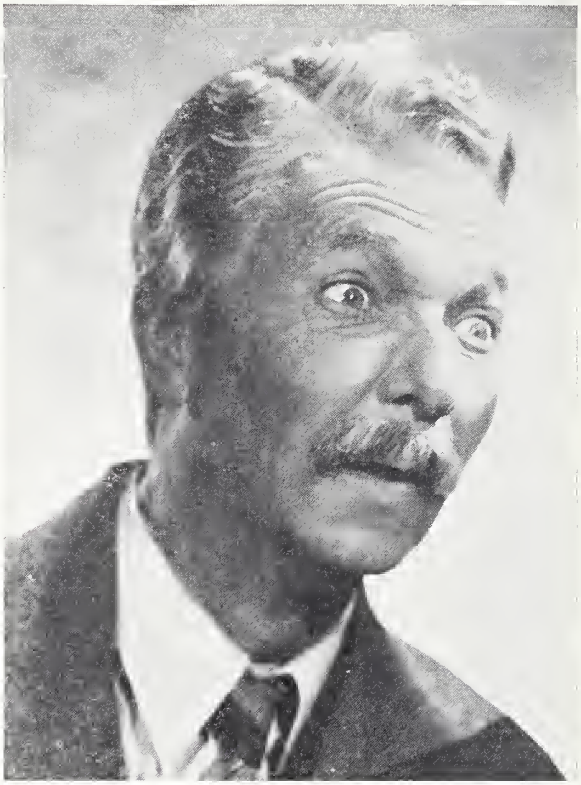
Kenneth E. Walter, M.D., 3879 Alberta Street, St. Louis, has become a member of the St. Louis Medical Society. Dr. Walter is a native of Illinois, received his preliminary education in St. Louis, and his M.D. degree from St. Louis University School of Medicine in 1956. He interned at St. Mary's Hospital, St. Louis, and is serving a residency there as well.

MISSOURI ACADEMY

(Continued from page 1110)

attend the President's Installation Banquet on Saturday night, November 6, on the Chase Star Light Roof. The featured speaker for that occasion is none other than Mr. Chester Lauck, who many of us will remember as "Lum," the lovable backwoods Arkansas store keeper and half of the popular "Lum and Abner" comedy team of radio and movie.

Chet Lauck has been an executive assistant with Continental Oil Company, Houston, Texas, since 1955, and travels more than 100,000 miles annually. He is in constant demand for speaking engagements all over the United States and is continually on the go. He recently spoke in 18 states in just one month with these states spread from coast to coast. He is a rare combination of businessman and entertainer and certainly will help to make the annual banquet a most attractive occasion for doctors, their wives and friends. Are the dates, November 5-6, 1960, marked on your calendar?



Mr. Lauck as he appears as "Lum" of "Lum and Abner."

SOUTHWEST CLINICAL SOCIETY

(Continued from page 1146)

tend. The program will be carried in detail in the September issue of the *Journal of the Kansas City Southwest Clinical Society* or may be obtained by writing the Kansas City Southwest Clinical Society, 3036 Gillham Road, Kansas City 8, Missouri.

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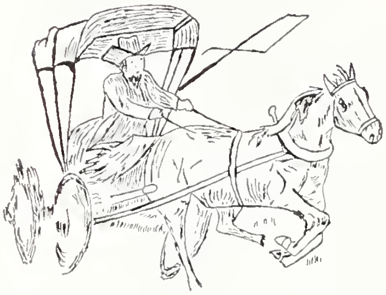
Missouri Medicine in Review



FORTY YEARS AGO

The people of Columbus, Mo., are anxious to have a physician locate in that town. It is a good farming community near Warrensburg, the county seat of Johnson County.

State Hospital No. 4 at Farmington, recently acquired a farm of 100 acres adjoining Farmington. This gives this institution an aggregate of 1,350 acres of land under its control. This large acreage is beneficial to the state financially, and affords healthful, congenial outdoor life to the 800 mentally ill patients at the hospital.

The twenty-fifth annual meeting of the American Academy of Ophthalmology and Otolaryngology will be held in Kansas City, October 14, 15, 16, at the Muehlebach Hotel.

The results obtained with the treatment of lepers at the leprosy investigation station in Kalihi, Hawaii, with the ethyl esters from chaulmoogra oil have been encouraging. It will require, however, some time to determine whether a real cure for leprosy has been discovered.

TWENTY-FIVE YEARS AGO

The thirteenth Annual Fall Clinical Conference of the Kansas City Southwest Clinical Society will assemble in Kansas City October 7-10.

The members of the Boone County Medical Society will be hosts for the annual meeting of the Ninth Councilor District at Columbia on September 17. This meeting has been planned as a Southern Medical Association Day in Central Missouri.

There are few groups or individuals who did not lament keenly the death of Dr. Walter Williams of Columbia on July 29. While Dean Williams was before all things a journalist, his influence was felt in all fields, probably somewhat more in the medical profession than in many other fields. In 1930 he was drafted for the presidency of the University of Missouri and conducted the University through the worst economic storm in its history. Among his achievements as president was the adoption of the five year course in the School of Law and the reinstatement of the four year curriculum in the School of Medicine, both temporarily suspended so that the University could take care of the students already enrolled.

Dr. John Green, St. Louis, was elected chairman of the Section on Ophthalmology of the American Medical Association at the Atlantic City session. Dr. Green also was elected chairman of the American Board of Ophthalmology for 1936.

The first meeting of the Mississippi Valley Medical Society will convene at Quincy, Ill., October 2, 3 and 4. Dr. H. B. Goodrich, Hannibal, is president-elect of the society and Missouri members on the advisory committee are Dr. E. Lee Miller, Kansas City, Dr. C. T. Ryland, Lexington, and Dr. R. A. Woolsey, St. Louis.

TEN YEARS AGO

Ralph R. Coffey, M.D., Kansas City, participated in a two week Child Guidance course at Purdue University in July and taught "Health Problems."

Louis H. Kohler, M.D., St. Louis, was presented a television set by the employees of the St. Louis State Hospital at a surprise party on June 20, honoring his twenty-five years of service at the hospital.

The American Roentgen Ray Society held its 50th anniversary meeting in St. Louis, September 26 to 29, with headquarters at the Jefferson Hotel.

The Rev. Alphonse M. Schwitalla, S.J., St. Louis, dean emeritus of the St. Louis University School of Medicine, celebrated his fiftieth year in the Society of Jesus on July 25. A high mass was offered in St. Francis Xavier Church.

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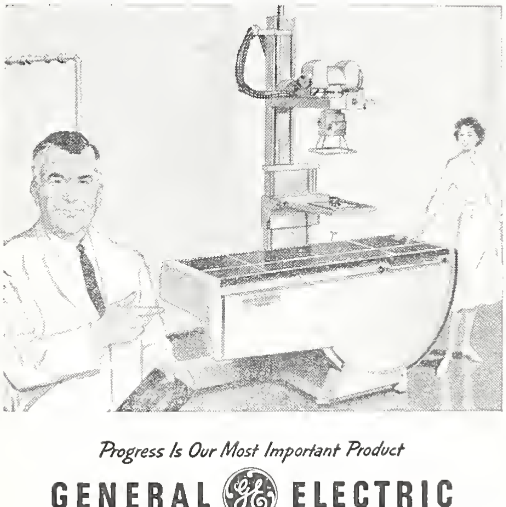

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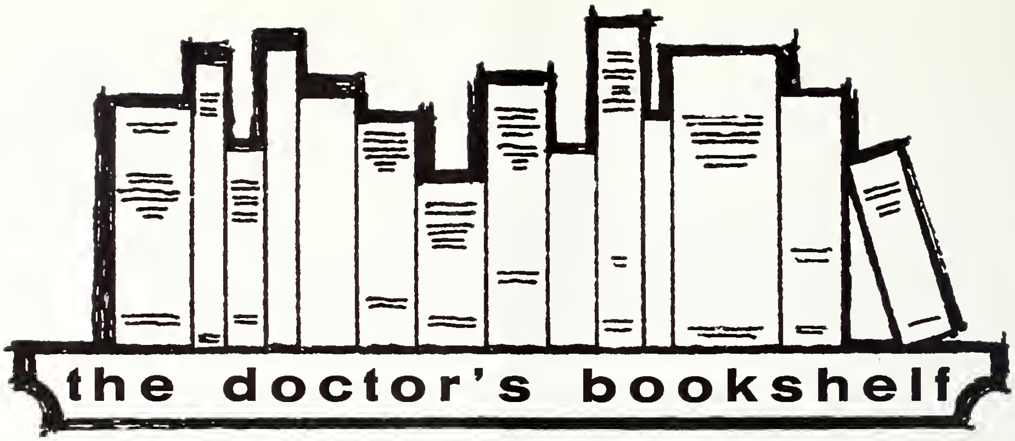

the doctor's bookshelf

BOOK REVIEW

Atlas of Roentgenographic Measurement, by Lee B. Lusted, M.D., Associate Professor of Radiology, University of Rochester School of Medicine and Dentistry; and Theodore E. Keats, M.D., Professor of Radiology, University of Missouri School of Medicine. The Year Book Publishers, Inc., Chicago, Illinois. 1959. Price $9.00.

This book should prove a frequently useful addition to any radiologic library, as it serves as a single source for information that otherwise would necessitate frequently a search through many volumes. Charts, drawings and data have been excerpted from numerous publications and systematically grouped in this relatively small book (176 pages) enabling the reader to rapidly and easily find pertinent data regarding radiographic mensuration with regard to given bodily areas or systems, and the variants expected with regard to age and sex. R. H. S.

BOOKS RECEIVED

The Office Assistant in Medical Practice, by Portia M. Frederick, Instructor, Medical Office Assistant, Long Beach City College; and Carol Towner, Director of Special Services, Communications Division, American Medical Association. Second Edition. W. S. Saunders Company, Philadelphia and London, 1960. Price $5.25.

Edema, Mechanisms and Management, edited by John H. Moyer, M.D., Professor and Chairman of the Department of Medicine, Hahnemann Medical College and Hospital; and Morton Fuchs, M.D., Assistant Professor of Medicine, Hahnemann Medical College and Hospital. W. B. Saunders Company, Philadelphia and London, 1960. Price $15.00.

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*) Abraham, W., in Green, J. R., & Steelman, H. F.: Epileptic Seizures, Baltimore, Williams & Wilkins Company,
56, p. 132. (2) Crawley, J. W.:* M. Clin. North America 42:317 *(March) 1958. (3) Bray, P. F.:* Pediatrics 23:151, *1959.*

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Missouri Medicine

THE JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Curiosa et Trivia

WILLIAM B. McCUNNIFF

One out of three suicides is accomplished by the use of drugs available only on prescription.

Before you head for some snowy vacation spot, refresh yourself with some fundamental physics: a skier weighing 150 pounds, traveling at 30 m.p.h. (not at all fast by tournament standards), develops a momentum of 6,600 foot-pounds per second. If he stops within two feet, the stopping force is 2,250 pounds. Not surprising, then, that about 80 per cent of the total injuries involve the ankle, knee and leg.

February 12, 1941: penicillin was given for the first time . . . to a police constable with sulfonamide-resistant septicemia. Improvement was immediate, but after two days, the patient died . . . the total available supply was used up.

In 1768, Heberden lectured in England on a disorder of the breast, which he called angina pectoris. A few years later, Louis Jenner established the connection between this and coronary artery disease.

Capsule Clinics

- Patients with angina undergoing a sham operation experienced the same degree of relief of anginal pain as did those subjected to internal mammary artery ligation. Dimond, E. G., et al., Am. J. Cardiol. **5**:483, 1960.
- Animal experiments indicate that the use of quinidine in treatment or prevention of arrhythmias induced by digitalis gives unpredictable results and may be hazardous. Rodensky, P. L., et al., Am. J. Cardiol. **5**:498, 1960.
- Sodium glucuronate therapy is without specific value in treatment of hyperbilirubinemia of the newborn infant. Schwob, M., et al., Pediatrics **25**:686, 1960.
- Passive transfer experiments suggest that the vast majority of infants sensitive to cow's milk could tolerate heat-denatured milk such as Similac. Crawford, L. V., Pediatrics **25**:432, 1960.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

Health Bill Approved

A Federal-state cost sharing health care plan which is in line with the AMA's legislative policy, has been sent to President Eisenhower for his signature. It is almost certain that he will sign the bill which provides health care for the needy and near-needy aged. . . . The medical care plan would become effective October 1, 1960.

Senate Action

The final hurdle for presidential action on the aged medical care plan was cleared on August 29, when the Senate voted 74 to 11 in favor of the compromise plan submitted by a Senate-House Conference Committee. . . . The compromise bill had been approved by the House of Representatives on August 26 by a vote of 368 to 17. . . . In essence, the conferees adopted the medical care bill as amended in the Senate with one exception. They eliminated a provision which would have extended its coverage to patients in mental and tuberculosis hospitals. . . . The provision for mental and tubercular patients had been contained in an amendment offered by Senator Russell Long (D., La.). . . . The Louisiana Democrat opposed giving final approval to the medical care bill which eliminated his amendment and delayed final vote on it with a 10-hour filibuster. . . . He held the Senate floor from 3:55 p.m., August 27, to 1:34 a.m., August 28, when agreement was reached to schedule a vote on the bill at 2:00 p.m., August 29.

Cost and Coverage

The conferees placed the cost of the first full year of the medical care program at $202 million for the Federal Government and $61 million for state governments. . . . The bill increases Federal funds to the states for medical services for the 2,400,000 persons already drawing old age assistance. . . . It also authorizes Federal grants to the states for payment of part or all of the medical services of about 10 million other aged persons who may at times need assistance with medical expenses. . . . Each state has the responsibility of determining the standard of eligibility for medical care and the scope of benefits and services to be provided. . . . Under the bill, some states will receive as much as $4 of Federal funds for each $1 of state funds they are willing to put into the medical care program. . . . The payment to the states would be from 50 to 80 per cent of an extra $12 a month for each person in the state on old age assistance rolls. . . . The amount, ranging from $6 to $9.60, would be dependent on the state's per capita income. . . . The states will put the money into an old age fund from which they can draw to pay the medical and hospital bills of the medically indigent.

Outside Income

The conferees also rewrote a section of the social security law to encourage the retired worker to earn outside income. Stricken from the law was a provision that for every dollar the person earns over $1,200, he loses a month's benefit. It was amended to provide that for every $2 he earns above $1,200 he would lose $1 of benefits until his outside income reached $1,500, when he would lose $1 in benefits for every $1 of excess earnings. . . . Rep. Wilbur D. Mills (D., Ark.) who drew up the original form of the bill (H. R. 12580) explained that the person over 65 would not "lose by earning more." . . . Rep. Mills and Sen. Robert S. Kerr (D., Okla.), who drafted a key amendment to H. R. 12580, believes this will be effective in helping the aged meet their medical bills.

Physician Coverage

The bill sent to the President does not provide for compulsory social security coverage of physicians. . . . This provision, originally in H. R. 12580, was taken out by a Senate amendment and was not reinstated by the Senate-House Conference Committee.

H. R. 10

As the post-convention session of Congress approaches its final days, it appears highly improbable that any action will be taken on H. R. 10.

This bill, known as the Keogh Bill, provides federal income tax deductions for self employed individuals, including physicians, who purchased an approved annuity or retirement program.

Senior Citizens for Kennedy

Senator John F. Kennedy has appointed the retiring Representative, Aime Forand, as the Chairman of the Board of Senior Citizens for Kennedy. Others named, all advocates of compulsory federal health insurance, are Oscar Ewing, Wilbur Cohen and Dr. Basil MacLean.

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Across Missouri

MSMA Establishes Medical Student Loan Fund

Early in September the Missouri State Medical Association's newly-created Medical Student Loan Fund issued four checks to medical students enrolled in medical schools in Missouri. These checks, representing the first loan applications to be processed by the fund, marked the beginning of an important new public service activity of the Association.

Established with an initial $25,000 Missouri State Medical Association appropriation voted by the Council, the loan fund is the latest in a series of progressive measures launched by the Association since the close of World War II to help place more doctors in rural areas in the state.

In providing financial aid to qualified medical students—many of them from the out-state area—the Association hopes to assist substantial numbers of young people with limited means to complete their formal educations. And since young doctors who have grown up in rural areas are most likely to set up practice in these communities, it is hoped that the new loan program, coupled with the Association-University of Missouri preceptorship program, will help where a shortage of physicians is said to exist.

"The expense of present-day medical education is often too heavy a burden for many families to bear without financial assistance—especially when the family must assume the added expense of a student living away from home," R. O. Muether, M.D., St. Louis, President of the Association, stated in publicly announcing formation of the Student Loan Fund on August 24.

"We hope that the new fund will help solve this problem for many young Missourians, to the benefit of the people in the state."

Dr. Muether pointed out that loans are being granted "for any worthy purpose directly connected with furtherance of the student's medical education, including tuition, fees, books, equipment and necessary living expenses while in residence at the school."

To be eligible for an MSMA loan the student must be a resident of the state and registered in an AMA accredited school. Qualified students may apply for individual loans—ordinarily not to exceed $1,000 per year.

Although it is still too early to estimate the number of medical students who may require assistance through the loan fund, approximately 600 Missouri residents are currently enrolled in medical schools throughout the country and therefore qualified to request such aid. Most of these students, however, are not expected to require financial assistance to complete their medical studies.

It is expected that the bulk of the loans granted will go to students at the state's three medical schools: The University of Missouri, Washington University and St. Louis University.

Notice of the establishment of the fund was sent to the deans of these three schools recently, and loan application forms are now available from their offices. Interested medical students also may secure application forms directly from the Association office but should make application through the respective medical school dean.

A nonprofit foundation is to be set up by the Association to administer the fund. Loans granted by the foundation will bear a 2 per cent annual interest rate from the date the loan is made until one year after the recipient begins the practice of medicine. Thereafter, loans are payable in five annual installments. On the date the principal of the loan becomes due, interest on the unpaid balance increases to 3 per cent, and increases an additional 1 per cent per year thereafter, up to a maximum of 6 per cent.

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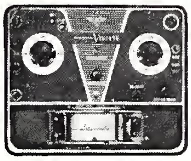

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The 12th Annual Scientific Assembly

PROGRAM

Saturday, November 5, 10:00 a.m.

SYMPOSIUM ON NEUROLOGY AND PSYCHIATRY

Practical Treatment of Depression, Kenneth Appel, M.D., Philadelphia, Professor of Psychiatry and Chairman of the Department, University of Pennsylvania School of Medicine.
The Multiple Sclerosis Syndrome, Walter L. Moore, M.D., St. Louis, Assistant Professor of Clinical Neurology and Psychiatry, St. Louis University School of Medicine.
The Depressive States and Suicide: Its Importance to the General Practitioner, Robert J. Mueller, M.D., St. Louis, Instructor in Neuro-Psychiatry, Washington University School of Medicine.
Trends in Modern Psychiatry and Their Development, Kenneth Appel, M.D., Philadelphia.
Panel Discussion on Neurology and Psychiatry.

SYMPOSIUM ON MEDICINE

Learning to Like the Patient With Functional Disease, E. H. Rynearson, M.D., Rochester, Chairman of Sections of Metabolic Diseases, Mayo Clinic.
Effective Use of the Low Salt Diet, Robert A. Schneider, M.D., Oklahoma City, Associate Professor of Medicine and of Psychiatry, Neurology and Behavior Sciences, University of Oklahoma School of Medicine.
The Problem of Jaundice in Females, William A. Knight, Jr., M.D., St. Louis, Associate Professor of Internal Medicine, St. Louis University School of Medicine.
Clinical Disturbances of the Pituitary Gland, E. H. Rynearson, M.D., Rochester.
Management of Migraine Headache, Robert A. Schneider, M.D., Oklahoma City.
Panel Discussion on Medicine.

PRESIDENT'S INSTALLATION BANQUET

President's Installation Banquet, Mr. Chester Lauck ("Lum" of "Lum and Abner") of the Continental Oil Company, Houston, Texas, Speaker.

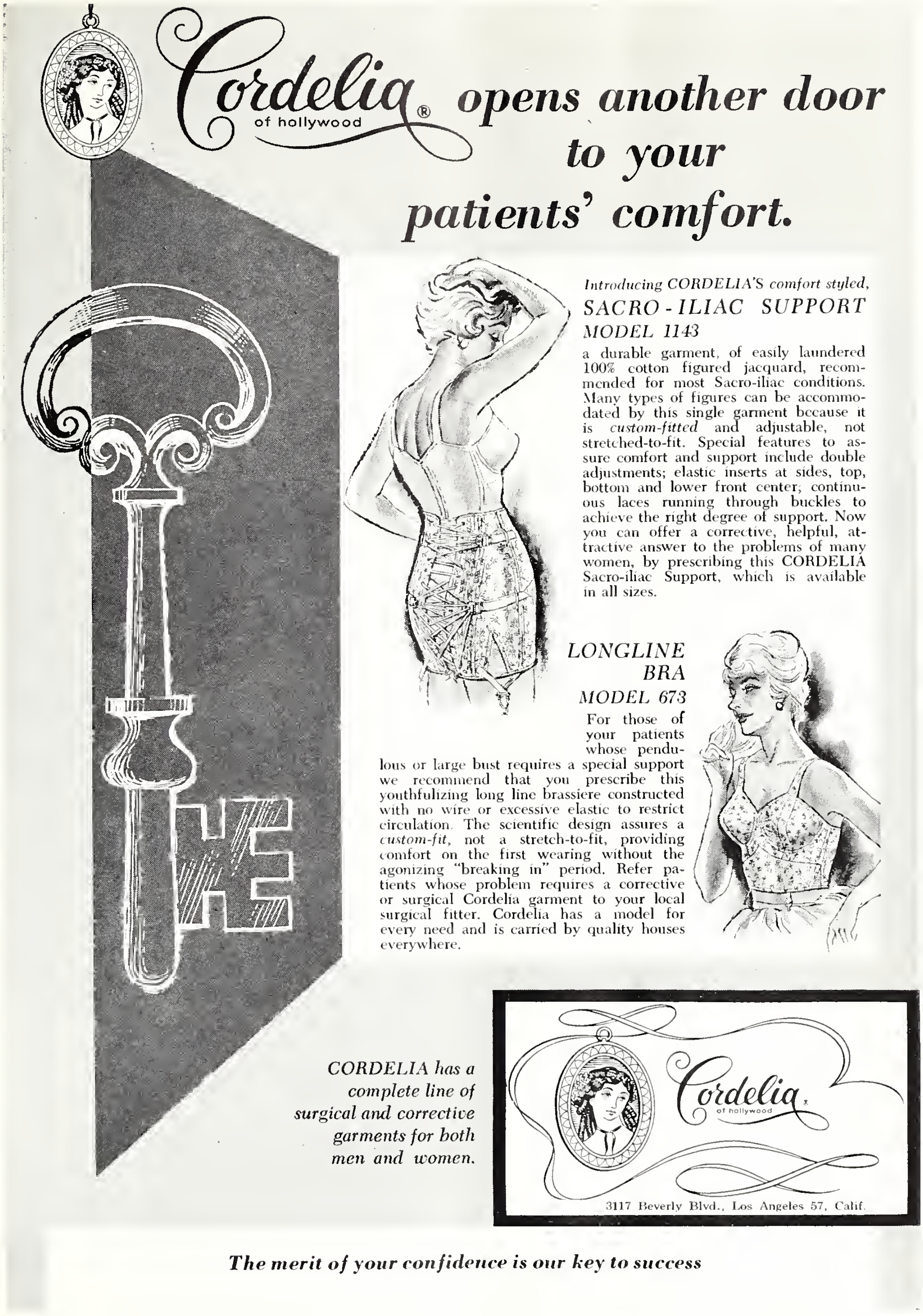
Sunday, November 6, 9:00 a.m.

GENERAL SCIENTIFIC SESSION

Pediatric Urological Problems: What the General Practitioner Should Know About Them, Elmer Hess, M.D., Erie, Pa., Urologist and Past President, American Medical Association.
Eye Injuries: General Medical Evaluation and Management, John A. Buesseler, M.D., Columbia, Associate Professor and Chief of Ophthalmology, University of Missouri School of Medicine.
The Changing Character of Pulmonary Infection, L. R. Sante, M.D., St. Louis, Professor and Director of Department of Radiology, St. Louis University School of Medicine.
What Can Be Done for Deafness, T. E. Walsh, M.D., St. Louis, Professor of Otolaryngology and Head of the Department, Washington University School of Medicine.
Growth and Development of Family Physicians, Vernon E. Wilson, M.D., Columbia, Dean, University of Missouri School of Medicine.
Urological Differential Diagnosis: What the Generalist Should Suspect From the History and Physical, Elmer Hess, M.D., Erie, Pa.
Panel Discussion.

SYMPOSIUM ON SURGERY

Diverticulitis, C. W. Mayo, M.D., Rochester, Surgeon to the Mayo Clinic.
Modern Trends in the Basic Physiology and Treatment of Hyperthyroidism, Brown M. Dobyns, M.D., Cleveland, Professor of Surgery, Western Reserve University School of Medicine.
Diagnosis and Treatment of Heart Failure in the Operating Room, Kenneth K. Keown, M.D., Columbia, Professor and Chairman of the Department of Anesthesiology, University of Missouri School of Medicine.
Results of Various Operations for Urinary Diversion, Eugene M. Bricker, M.D., St. Louis, Associate Professor of Clinical Surgery, Washington University School of Medicine.
Tumors of the Thyroid and Their Management, Brown M. Dobyns, M.D., Cleveland.
Terminal Ileitis, C. W. Mayo, M.D., Rochester.
Panel Discussion on Surgery.



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Woman's Auxiliary

In mid-August, your President attended the Regional Legislative Conference sponsored by the A.M.A. Council on Legislative Activities at French Lick, Indiana. Once again, she was forcefully reminded that many physicians are inclined to put themselves in a cell, thinking themselves above participating in political affairs, failing to donate to their political parties or to support civic affairs, always giving the excuse, "I have to go to the hospital," must, at last, display a sincere interest in their committees and in politics. This also applies to doctors' wives.

Mrs. Jordan Kelling

Joseph J. Eley, President of Public Affairs Councillors, Inc., conducted the Applied Citizenship Training Program at that meeting in French Lick. We reacted to some of the truths he spoke as if those truths might have been physical blows.

Mr. Eley spoke often of the importance of the "image of the candidate." Build a good image of the candidate for the people, said he, and the people vote for that image.

Unfortunately, unbeautiful images are sometimes created by politicians and the unattractive image of the nation's doctors as a group of selfish, grasping individuals has been created by those who oppose certain stands taken by the A.M.A.

Speaking of the favorable image which can be created for a candidate, Mr. Eley included the influence of a candidate's wife in creating the image, saying "the typical gingham-girl," is the ideal from a vote-winning standpoint.

Your President was weeping inside for these wonderful men, our doctors, and, remembering the reference to the successful gingham-girl, risked heart-failure from fear, and made so bold as to ask a question from the floor.

"Is the doctor's wife a part of the base image created of the nation's doctors?" she asked.

Mr. Eley said no. "But," he said, "it can be a great task for the doctors' wives to remake the image"—making it once more the ideal image of the kindly family doctor.

(The wistful thought occurs that, perhaps, along with this image remaking must come the reconstruction of the family unit as the basic element in our nation's society. But, that was not touched in the conference, and we shall not go wandering.)

October is AMEF Month in Missouri. When the maple trees dress for the last performance of the year, putting on their red and gold costumes, remember that this is the month of great endeavor for the Missouri State Medical Association and its Auxiliary. This is the month when we concentrate our efforts on raising contributions to give to our medical schools in Missouri, and throughout the United States; it is the month when we concentrate on the generations of young physicians who will follow the footsteps now being made in the path of medicine. This is our great chance to preserve and enhance the heritage of American Medicine. Please give a great deal of serious thought to the reasons for working to keep our medical schools free from obligation to the government, as you contemplate the beauties of Autumn, and do not fail to support the American Medical Education Foundation. Also, please do not fail to remember the appropriate cards which the Auxiliary has for your convenience and which come in three designs: sympathy, appreciation, and a general utility card suitable for congratulations, birthday or ever so many occasions. It is simple to make use of these cards. You have only to write to your County AMEF Chairman, enclosing your donations and name and address of the person whom you wish to remember with one or another of these cards. She will send that person a card, and you will receive a card confirming your request and the receipt of your donation.

And, now, for just one little personal word from your President. I receive such wonderful response, such beautiful enthusiasm from all around in all that we try to do that it becomes a sort of magic wand, turning all that should be classed as "work" for me into pure pleasure. You cannot possibly know what it means to me!

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Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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LEONARD F. JOURDONAIS, M.D., *and*
ARNOLD L. WIDEN, M.D., *Evanston*

Nonspecific Ulcerative Colitis: An Enigma

It is pointed out that the etiology of nonspecific ulcerative colitis is unknown. The incidence of occurrence, methods of treatment, both medical and surgical, are discussed, and the results of treatment as reported by many authors are reported.

Drs. Jourdonais and Widen are from the Departments of Medicine, Evanston Hospital Association, Evanston, and Northwestern University Medical School, Chicago.

Nonspecific ulcerative colitis is a disease of ready diagnosis, but in its pathology, etiology, pathogenesis and, to some extent, in its therapy, it continues to be an enigma. Since its first description by Von Roketansky, a Viennese pathologist, in 1842, and Jean Cruveilhier, in 1850, numerous authors have written on this subject. The disease was more completely described by Allchin in 1885 and White, who suggested the nonspecific etiology, in 1888. It is interesting to note that Follet in 1885 produced a cecal fistula to divert the fecal stream but not until 1913 did Brown perform the first transverse ileostomy for immobilization of the colon.

Knowledge of etiology, pathology and treatment has not advanced with the rapidity of knowledge of other diseases. The pathologic lesion of nonspecific ulcerative colitis represents the first enigma. These lesions, however, usually have been studied from colons which are grossly involved and which have been removed at surgery or at autopsy. Recently, however, Lumb and Protheroe have studied surgical specimens of segmental ulcerative colitis which demonstrated normal areas radiographically and on gross inspection. They describe the earliest lesion as being normal to the naked eye but with histologic involvement of the crypts of Lieberkuhn. These are plugged with polymorphonuclear leukocytes, surrounding capillaries are mildly dilated, and the laminopropria infiltrated with lymphocytes.

In their Group II, foci vary from red areas to small erosions and frank ulcers surrounded by pale, normal-looking mucosa. Single or adjacent groups of cysts sometimes become grossly distended by pus in the lumen of the cyst. The cells lining these crypts show degenerative changes such as vacuolated cytoplasm, breakdown of nuclei, loss of cell outline and neutrophilic infiltration. Thus their impression is that the earliest active lesion in nonspecific ulcerative colitis develops in the base of the crypt. As necrosis progresses, erosions establish continuity between the lumen and the submucosa. The accumulation of neutrophils with eosinophils, red blood cells, serum and mucus in the lumen of the crypts constitutes the so-called crypt abcess, a characteristic of ulcerative colitis. In some cases, a large number of eosinophils are observed. As the disease progresses, numerous crypts become involved in a large area of breakdown, and infective material is liberated into the submucosa resulting in wide-spread ulceration. These ulcers are rarely clear cut and usually present an irregular pattern of necrotic debris and inflammatory cells.

This agrees with the observation of Shields Warren who, in some instances, finds the earliest lesion that of a crypt abcess with extension of linear longitudinal ulcers along and between the inteal muscle landmarks. The mucosa between the ulcers is dark red or purple and may overhang the ulcers. Sometimes the mucosa may become completely denuded except for a few elevated patches of epithelium which may hang free as a pseudo polyp. Shields Warren, however, in 50 per cent of his cases, could find no area in which the disease was initiated. In 40 per cent of Warren's cases, he agreed with Lumb that the earliest change seen is polymorphonuclear cells in the base of the colonic mucosal glands, but he notes no involvement of the epithelium in the mucosal crypts. Warren feels that some characteristic of the mucus produced attracts leukocytes, which, when present in sufficient number, crowd the mucosal crypt until an abcess forms which then ruptures and discharges pus into the submucosa. Crops of abcesses allow pus to dissect along and to separate portions of the mucosa from their blood supply with resulting sloughing and ulcer formation. Associated with this destruction there is evidence of attempted regeneration in the colon but relatively little involvement of the muscular and serosal layer. The regional lymph nodes are inflamed, and, in long-standing cases, fibrotic.

In Lumb's Group III, ulcers extend as deep as the muscularis mucosa. The inflammatory exudate often involves the submucosa. The intact cells in the surrounding epithelium differentiate into an increased number of goblet cells which pour out an excess of mucus which coats the adjacent mucosa. The laminapropria is edematous and the capillaries dilated and congested. The degree of capillary engorgement does not correlate with spread or severity of inflammation. Lumb also describes obliterative endarteritis and thrombosis of adjacent vessels and feels that a variety of causes and stimuli are responsible for producing spreading ulceration of the colonic mucosa. Shields Warren found that in 10 per cent of his cases with severe clinical course and frequent death, the ulcers are larger, deeper and more irregular. At the base of the ulcer, inflammatory necrosis of the blood vessels, both arteries and veins, leads to vascular occlusion with infarction of a part or all of the adjacent colon. This lesion closely resembles periarteritis nodosum or thromboangiitis obliterans. This focal vascular disease with ulceration results in what Warren terms a vasculitis colitis. This type of ulcerative colitis carries a high mortality with approximately a 40 per cent death rate from perforation and peritonitis. Shields Warren calls attention to the other associated pathologic changes such as arthritis, iritis, nephritis, dermatitis, thrombophlebitis, toxic hepatitis and neuropsychiatric problems. Shields Warren concludes that this involvement of many organs represents a disease of the whole body with the most striking manifestation in the colon and compares nonspecific ulcerative colitis to a collagen disorder.

In contrast, McGovern and Archer write that the basic pathologic change in nonspecific ulcerative colitis consists of congestion, edema, muscle spasm and hypertrophy, and that the congestion and edema occur especially in the submucosa. Typical acute cellular reaction occurs only after ulceration has appeared. They state that the superficial ulceration is due to the excoriating action of intestinal contents passing over congested and edematous mucosa, and that this type does not penerate to the muscularis. Deep ulceration, in their opinion, arises from strain due to stretching of the mucosa in places where it is firmly attached over the muscular taeniae and in crypts between the rugae. They state that the fundamental reaction in the gut is typical of the so-called histamine release phenomena and point out that in experimental animals histamine release agents such as ovoalbumin, dextran and acetylcholine cause edema, congestion and contraction of smooth muscle. They state that the human intestine contains many mast cells in the submucosa but few in the muscularis. These mast cells liberate histamine, heparin and a substance causing increased capillary permeability. Histamine release implies liberation of all of these three substances.

Goldfarb recently has reported with Kirschner and Palmer from the University of Chicago that their experience does not agree with Shields Warren in that they do not find cryptitis and vasculitis as a constant finding in the mechanism of ulceration of the colon. They state that cryptitis generally has been infrequent and that ulceration of the mucosa has not always been associated with cryptitis. They point out that Gallart and Mones have observed desquamation of endothelial cells in the blood vessels of the submucosa, and they consider these thrombi significant features of the disease. Thrombotic phenomena have also been implicated by Buie and Bargen. Thrombosis, together with other features, such as tissue eosinophilia, lymphatic dilatation and perivascular infiltration, according to Goldfarb, is compatible with a hyperimmune mechanism. Goldfarb further points out that there are numerous interesting histologic features yet to be investigated in ulcerative colitis including cryptitis, vasculitis, endothelial desquamation, granulomatous inflammation, changes in the basement membrane of the epithelium of the colon and rectum, degeneration of epithelial cells, hyperfunctioning of mast cells and the difference and similarities in the histologic picture of ulcerative colitis and regional enteritis.

None of these authors discuss the segmental involvement of the colon in the ulcerative process. It is difficult to explain why such ulceration may occur in the right colon, left colon, the rectum or the transverse colon and leave other parts of the colon undisturbed. Both Crohn and Shields Warren dispute the similarity of the lesion of ulcerative colitis and that of regional ileitis and state that the lesion of ileitis is a granulomatous lesion, a lymphangitic lesion associated with an elephantiasis of the ileum and with extension to the mesentery and regional lymph nodes. This lesion may extend into the colon, but, when it does, continues to appear as a granulomatous lesion.

The lesion of ulcerative colitis, however, is primarily ulcerative and while it may, by backwash, extend into the ileum, it remains as an ulcerative lesion and does not involve the mesentery or the regional lymph nodes except as an inflammatory reaction. Crohn points out that backwash ileitis occurs in 25 per cent of serious chronic cases of ulcerative colitis and 40 per cent of right-sided segmental ulcerative colitis and feels that this implies an infectious origin. Kurt and Brown classify ulcerative colitis into chronic ulcerative colitis with backwash ileitis, ileitis with secondary colitis, indeterminate iliocolitis and segmental ulcerative colitis. They define segmental ulcerative colitis as involving a segment of the colon but not involving the rectum or ileum. Again, it is difficult to understand why such a localized disease occurs in this normally diffuse process.

Other pathologic abnormalities associated with ulcerative colitis include shortening of the colon, with increased muscular tone, as shown by Almy. Posey and Bargen have reported diminished 17-ketosteroid urinary excretion, abnormal urinary excretion of corticosteroids and impairment of adrenal reserve. Protein anabolism is reduced and osteoporosis frequently occurs. A patient with ulcerative colitis is in negative nitrogen balance, largely due to the five to six times normal loss of nitrogen in the stool. Nutritional deficiency and anemia are frequently observed. This is the result of infection, poor iron utilization and blood loss. Dehydration and loss of electrolytes, especially sodium and potassium, occurs. There is an increased excretion of lysozyme.

ETIOLOGY

The etiology of nonspecific ulcerative colitis remains particularly obscure. The disease occurs predominantly in the second and third decades, is not transmissible and is generally not considered to occur as a familial disease, although Banks and Korolek report a familial incidence of 3.7 per cent. This is considerably higher than the incidence of the disease in the general public. There is no known immunity, and the disease does not appear to be infective or to occur in epidemics. It seems to have a higher incidence in northern climates than it does in the southern, and it occurs more frequently in the white population than in the Negro. However, in the North, the percentage of admissions to public hospitals is about the same in the Negro as in the white. The incidence of admissions in private hospitals is higher than that in public hospitals. McMahon and Morton, studying the problem of ulcerative colitis in the South, refer to the disease as having a low incidence although somewhat higher in the Touro Infirmary than in the Charity Hospital in New Orleans.

The admission incidence in the Birmingham Baptist Hospital was about .6 per thousand hospital admissions as compared with five to 10 cases per thousand admissions in northern hospitals. Bargen has suggested that this reduced incidence is because of the lesser respiratory infections found in the South. However, this does not explain the observed mildness of the ulcerative colitis seen in the South. McMahon and Morton report that only two of their cases required surgery. These authors suggest that the social attitudes of the southerner may account for the reduced incidence.

Many etiologic factors have been implicated in the production of nonspecific ulcerative colitis. These include infections, infestations with parasites, virus infections, vasculitis, allergy, lysozyme increase, nutritional and psychogenic factors.

While it is well known that precipitation of colonic ulceration or exacerbation of previously existing colonic ulceration may follow respiratory infections, it is difficult to implicate any specific infectious agent as etiologic. Numerous organisms have been associated with ulcerative colitis and have been reported to be causative at one time or another. Bacillary dysentery is thought by Berkowitz and others to be an etiologic agent. The clinical picture of chronic bacillary dysentery and chronic ulcerative colitis is not dissimilar. While this organism is not commonly found, Mackey reports as high an incidence as 24.4 per cent. Bargen, however, reports no such organisms found in his studies.

It is generally believed now that an acute or even chronic form of bacillary dysentery is simply the agent which triggers the ulcerative process. The same may be said for other organisms which have been implicated in the past, such as bacterium necrophorum and the various cocci including the enterococci of Bargen. Paulson has shown that the blood of the gut inhibits the growth of certain organisms and, therefore, streptococci are found with greater frequency. We were able to demonstrate some years ago that any process which increased the motility of the bowel increased the number of streptococci found on stool culture. Patients given saline cathartics for several days showed a great predominance of streptococci on stool cultures. Today it is generally agreed since the use of antibiotics and virtual sterilization of the bowel has no effect on the ulcerative process, that bacteria are probably secondary invaders, and that no specific bacterial etiologic agent can or will be found. Bacterial sensitization occurs and may be effective in the production of hypersensitivities, as will be discussed later.

Parasites such as entameba histolytica and balantidium coli produce ulceration of the colon, but no consistent or definite relationship between the histolytica and chronic ulcerative colitis has been observed. Again, it may be a precipitating agent, but response to treatment will clearly differentiate the ulcerative process of histolytic infestation and chronic ulcerative colitis.

Deficiency states have been indicated as a factor in the production of ulcerative colitis. McCarron, Wintrobe, Paulson and others have produced ulcerative lesions experimentally by deficiency diets, but feeding, especially of pantothenate, does not heal these lesions. The deficiency state also is probably secondary to the failure of absorption of vitamins and other essential dietary elements and results in associated exaggeration of a preexisting colitis. The observed alteration in plasma proteins and inversion of the globulin albumin ratio is also the effect of nutritional deficiency and probably associated with some liver malfunction.

Meyer, Gelhorn and others have implied that local overproduction of lysozyme, a mucolytic enzyme which destroys the mucus protecting the bowel mucous membrane, may be responsible for ulcerative colitis. With the destruction of the mucus-protecting substance, a necrotizing action on the bowel membrane by indigenous bacteria may occur. It is true that lysozyme is increased in ulcerative colitis, and since it is not found in the ileum, it must be formed in the colon. Grace, Wolf and Wolff have pointed out that anger and resentment cause colonic hypermotility and hypersecretion of mucus and lysozyme. Reifsneider and Gray, however, inhibited lysozyme with detergents to normal levels with no change in the course of the disease, and they felt that lysozyme is an index of tissue injury and of the severity of the disease but not an etiologic factor. This is presently the thought regarding lysozyme as an etiologic agent.

Viral infections have been implicated as causative in chronic ulcerative colitis. There is no evidence of specific relationship except in the case of lymphogranuloma venerium in which ulcerations can occur. However, this disease is readily distinguished from ulcerative colitis by the Frei test or by the mouse brain test of Kirschner and Palmer. Mones and San Juan state that viruses effect the endothelial cells of the blood vessels of the bowel producing embolic reactions and ischemia of the bowel which, with the action of bacteria, may cause ulcerative colitis. Recently, Helwig of Kansas City, has reported inclusion bodies in seven to 12 cases of ulcerative colitis. These inclusion bodies have previously been reported in polyps and carcinoma of the colon. These are found near the basement membrane and probably represent a collection of DNA material. Kirschner and Palmer have been unable to produce colonic lesions with bacterial-free filtrates. Cantor has found Echo viruses in the gastrointestinal tract after tissue culture inoculation. However, no good evidence is currently available indicating the virus as etiologic. There is no evidence that fungi are causative although histoplasma, monilia and other fungal forms have been found.

Two theories of etiology which can readily be dismissed are those of psychogenic causation and hypersensitivity reaction. Numerous authors have associated the development of ulcerative colitis with emotional or functional factors. Observation of the young individual with ulcerative colitis reveals a rounded chin, a somewhat thickened, wrinkle-free and sallow complexion coupled with a madonna-like expression of passiveness. English and Weiss have shown that the patient with ulcerative colitis has an unconscious hostile trend with suicidal drives, a feeling of dependency and sexual immaturity with poor ability to take responsibility. These individuals also show depressions and have a psychic structure similar to that of the manic depressive state. They frequently have asocial behavior marked by aggressiveness. Whether these reactions are etiologic cannot be proven, yet the close similarity of behavior and appearance of these individuals indicates a basic underlying generalized systemic abnormality. There can be no doubt, however, that this type of emotional reaction cannot be the sole etiologic factor.

Almy, in his study of the physiology of the colon, has shown that tension, hostility, tenacity and defensiveness are all present in patients with diarrhea, and that increased activity of the sigmoid with increased segmental contraction can hold the stool in the sigmoid until it is dehydrated and scyballus. There develops therefore excessive nonpropulsive sigmoid activity and spasm. This may result in blocking of the gastrocolic reflex. When diarrhea occurs, there is decreased motility of the sigmoid, increased longitudinal contraction with shortening but no rhythmic contraction of the circular muscle and associated vigorous rhythmic contraction of the right colon. Almy states that this is similar to the pathophysiologic change in chronic ulcerative colitis. He has further shown that strong contractile colonic waves of type IV are produced with hostility but not with other strong emotions.

Portis states that emotional factors produce stimulation of the parasympathetic or cholinergic system, the vagus and the sacropelvic nerves, which results in an increase in intestinal tone and motility along with an increased output of lysozyme and that this reaction in under vagal control. He feels that the alteration and concentration of pancreatic enzymes reaching the distal colon, together with bacterial action, are factors involved in the production of chronic ulcerative colitis. It has also been shown that acetylcholine with shigella toxin will produce pallor and finally bleeding and petechiae of the colon. However, vagotomy is of questionable value as is section of the sacralpelvic nerves in treament of chronic ulcerative colitis. The effect of lysozyme and pancreatic enzymes has generally been discarded.

While most authors agree that emotional factors play a role in the development of ulcerative colitis, a careful study of the literature makes it difficult to find a single factor or group of factors which have a direct relationship to ulcerative colitis. It is quite obvious that any patient having chronic ulcerative colitis would, of necessity, have a good deal of insecurity, and it is difficult to say what is causative and what is resultant. Burrey in 1930 reported 12 cases in which he described sexual conflicts associated with marriage and a close mother-tie. Sullivan in 1932 reported six cases of psychogenic origin and felt that chronic ulcerative colitis had its origin in psychogenic disturbance in 60 per cent. He felt that usually these abnormalities lay in the field of the sexual area. However, financial worries were important, but Sullivan's studies were made in 1930 to 1935, and I am sure most were concerned with financial troubles during those years. Wildour, in his study of 35 patients, felt that more than 92 per cent of these presented psychologic abnormalities. However, he could find no consistent type of disturbance, and his studies were poorly controlled. Daniels studied 25 patients for a 10 year period and found no consistent factor but felt that childbirth was frequently a precipitating cause, and that there was a definite mother-fixation in these patients. Yet others, including Paulson, have seen no effect of pregnancy, and, indeed, in some instances, improvement in the ulcerative process occurred during pregnancy. In most instances the groups studied by the psychiatrists have been rather poorly controlled and are usually a selected group of patients, and I do not feel that one is justified in indicating psychogenic cause as a sole factor. There can be, however, no doubt but that it does play a role in the pathogenesis of ulcerative colitis.

The final etiologic mechanism is that of a hypersensitivity reaction. Allergy has been considered as etiologic, or at least a contributing factor, for many years. Among proponents of this idea are Andreasson and Rowe who state relief was obtained in some cases by the elimination of certain foods such as milk, wheat, tomatoes, oranges, eggs. But Tufts believes the evidence of a food allergy is inadequate for specific etiologic relationship, and that no regularity of remission can be obtained. Since 10 per cent of people are normally allergic, there are undoubtedly some cases in which the removal of offending foods is beneficial. Vaughn and Black in their textbook on "Clinical Allergy" state that allergy as an etiologic factor is controversial with little evidence to support it. Hansel does not mention chronic ulcerative colitis under gastrointestinal allergy, and Sheldon, Lovell and Mathews, writing in 1953 in their "Manual of Clinical Allergy," make no mention of allergy as an etiologic factor in ulcerative colitis.

In our experience, bacterial sensitivity does occur in ulcerative colitis, since, when one tests dilute suspensions of organisms obtained on culture from patients with ulcerative colitis by intracutaneous inoculation, skin sensitivity reactions occur. These at times are extreme and result in bullous formation. The reaction is not consistent in terms of organisms. At times colon bacilli or streptococci or other organisms will give this reaction, and all bacteria from a given individual will not so react. However, considering the pathology of ulcerative colitis, it is not surprising that certain types of sensitization may occur, and this need not represent an etiologic factor other than that the increased permeability of the gut wall allows certain of these bacteria to circulate through the body, stimulating the production of the hypersensitivity reaction. This could well be part of the explanation of the histamine release hypothesis of the pathogenesis of ulcerative colitis as proposed by McGovern.

More recently the theory of hypersensitivity reaction has been proposed, particularly by Kirschner and Goldfarb. It is generally thought that vasculitis is an integral part of a hypersensitivity reaction as it is found in periarteritis nodosum and other types of generalized vasculitis. According to Shields Warren, a vasculitis is one of the findings in nonspecific ulcerative colitis, and Goldfarb has also described vasculitis as indicative of hypersensitivity in this disease. The presence of large numbers of mast cells in the submucosa and even in the muscularis in ulcerative colitis would be further evidence of this effect. The ameliorating effect of steroids on chronic ulcerative colitis adds evidence of the hypersensitivity reaction. Recently, Gajdusek, Carleton and McKay have reported from Australia that they are able to find autoimmune complement fixating antibodies in any disease associated with a globulin disturbance. Their study concerned itself particularly with hepatitis, but they included lupus erythematosus and other diseases of the liver.

It might be noted that in chronic ulcerative colitis an increase in gamma globulin and alpha globulin occurs, and Gajdusek found an increase in autoimmune complement fixating antibodies in one out of two cases of ulcerative colitis studied. Broberger and Perlman, using phenol water extracts of colonic tissue, found positive precipitin reactions in 22 of 30 cases of ulcerative colitis and positive agglutination reactions in 28 of 30 cases in which red cells coated with colonic extract was used as antigen. The authors regard this as confirmatory evidence of an immunologic disorder with gamma globulin as the active fraction. Recently, Kirschner and Bregman have reported that the colon tissue in ulcerative colitis may become antigenic. Their studies, using a variety of immunologic procedures, revealed that colon extracts reacted as antigens only with the sera from individuals with ulcerative colitis and not with the sera from normal persons or patients. It is of interest to note that such antibodies did not appear in patients with regional ileitis. The antibodies found by these workers were multiple and at least two types, heteroantibodies and autoantibodies, were demonstrated. The antigenic material of the colon was reported to be a peptide containing lipid and polysaccharide components.

This type of etiologic factor would best explain the multiplicity of reactions which occur in ulcerative colitis and the involvement of organs other than the colon. Certainly one can agree with Shields Warren that ulcerative colitis involves many organs, and that the disease is probably a disease of the whole body with the most striking manifestation occurring in the colon. Paulson has stated that chronic ulcerative colitis is a syndrome in which a variety of factors operate to produce a fairly defined pathologic and clinical picture.

Treatment

The treatment of ulcerative colitis also presents enigmas. The severity of ulcerative colitis is attested to by the report of Wheelock and Warren who studied 483 patients with ulcerative colitis who were followed for 10 years or until death. These patients were studied between the years 1915 and 1947. Of their total series, 45.3 per cent were living and 54.7 per cent were dead.

Marshek, et al, who studied 244 cases of ulcerative colitis from Harvard Medical School and who were able to follow these patients for 10 years, reported a 21 per cent mortality. However, they noted that excellent results were obtained in 37 per cent of the cases treated supportively, and in 52 per cent of patients treated after antibiotics and chemotherapy were added to the regime. Failures were 30 per cent and 16 per cent respectively. Their figures, however, indicated that 34 per cent of their patients required surgery. By contrast, Kirschner, in a long-term follow-up study of 240 patients, found surgery necessary in only 11 per cent and an overall mortality of 5 per cent. This is interesting in light of the fact that most authors report a 9 to 12 per cent development of carcinoma in a 10 year period of ulcerative colitis.

Bargen, et al, has reported a 25 year survival rate of 57.8 per eent of 1,564 patients under the age of 50 at the time of diagnosis of ulcerative colitis. The normal expected survival rate at this age is 79.3 per cent. Thus we are justified in stating that the use of modern treatment, including chemotherapeutic agents, has materially altered the course of ulcerative colitis, but it is difficult to assay the value of the various methods of treatment and to evaluate the indications for surgery. In the medically managed patient with ulcerative colitis, the usual supportive measures of transfusion, vitamins, iron, restricted fiber diet and reassurance are time honored and accepted by all authors. Psychotherapy during the course of the acute ulcerative colitis is recognized as dangerous, and many authors, including ourselves, have noted acute exacerbations of ulcerative colitis when attempts have been made to determine psychogenic factors during the period of acute exacerbation.

Since the treatment of the complications of ulcerative colitis, both systemic, including iritis, arthritis or suppurative arthritis, pyodermia, anemia and others, and the local complications of hemorrhage, perforation, peritonitis, intractable anal fistulae or anovaginal fistulae and carcinoma are essentially the treatment of the ulcerative colitis, these need not be considered as a separate entity of treatment. However, in any proper consideration of treatment, the severity of the disease must be considered, and nonspecific ulcerative colitis may be divided into (1) acute fulminating disease, (2) acute exacerbating disease, (3) chronic disease and (4) disease in remission. Modern medical management should produce good to excellent results in from 50 to 75 per cent of patients. These obviously will be diseases of lesser severity. While acute fulminating or acute toxic ulcerative colitis will not represent more than 10 per cent of the total number of patients seen, medical management may be expected to produce remission in some 30 to 50 per cent of such cases. All authors agree that, with the exception of the acute fulminating or acutely toxic ulcerative colitis, all patients should be given a trial of medical management.

The two major preparations used in treatment today are the steroids, and of these the drugs of choice are Corticotropin and/or Prednisone or Prednisolone and the sulpha drugs of which salicylazosulphapyridine or azulfadine is the most generally effective. Moertel and Bargen, using supportive measures and salicylazosulphapyridine alone and without the use of steroids, have reported an incidence of substantial improvement or symptomatic remission of 78 per cent.

These figures are substantiated by Morrison who reported improvement in 70 per cent, Lagercrantz in 78 per cent, and Svartz in 77 per cent of patients so treated. These figures compare favorably with any series in which steroids have been used in treatment even in combination with the sulpha-like drugs. Kirschner, in the study of 240 patients treated with Corticotropin and/or oral steroids, has observed good results in 115 patients, favorable results in 80 and minimal results in 45 patients treated. Their overall mortality of 9 per cent is impressive, but it is to be noted that of 23 patients who died, seven died of complications associated with steroid therapy.

Wirtz, using Corticotropin and following patients for one to two years, has given a 20 per cent excellent result, 35 per cent good result and 15 per cent fair result with only 5 per cent failures.

Truelove in England has recently reported the use of corticosteroids by rectal drip and more recently has studied diffuse colon involvement eliminating those patients showing only anorectal involvement. With this method of therapy, he has reported 75 per cent rapid clinical remissions as compared to 33 per cent remissions in patients who took Prednisolone by mouth. The drug of choice in his hands was hydracortisonehemisuccinate sodium or Prednisolone 21-phosphate. Schwartz has reported similar results with the use of rectal steroids but his cases were mild, and the response was about 50 per cent within 48 hours. There were no systemic effects noted with the use of rectal steroids. Relapse rate is common by this method of therapy. However, it must be noted as above that Kirschner reports seven of 23 deaths associated with complications of the use of corticosteroids.

Texter, et al, reported the use of Corticotropin and, in some cases, Cortisone, in the treatment of severe or fulminating ulcerative colitis. In their cases they had eight patients with sustained improvement and seven with temporary improvement or made worse. In their series, one patient had a perforation of the colon and four patients developed giant longitudinal ulcers penetrating to the submucosa and extending as much as half the length of the colon. Cohen, Hoffman and Spero have reported a case of severe fulminating ulcerative colitis requiring colectomy and appearing for the first time in a patient treated with steroids for a disease unrelated to ulcerative colitis. It has been shown recently that the administration of steroids in some patients will produce an acute vasculitis similar to periarteritis nodosum.

Banks and Klayman have reported quiescent ulcerative colitis flaring up within six days after steroid treatment was instituted and requiring colectomy. Marshek and his coworkers have shown that of 16 cases of acute colonic dilatation in ulcerative colitis, nine patients were made worse by the steroids, one patient died, and five were improved. In four patients, the acute dilatation occurred within one to nine days of starting steroids.

Kirschner and Cohen, et al, however, have indicated that in general steroids do not produce an increase in perforation, ulceration or hemorrhage when used in treatment. The relationship of steroids to improvement in ulcerative colitis may lie in the anti-inflammatory property of these drugs, or it may lie in the control of hypersensitivity states.

It is with some temerity that I approach a discussion of the surgical management of nonspecific ulcerative colitis. As an internist, however, I have had the opportunity to observe many of the surgical results and therefore feel qualified to appraise these results. Several conditions are generally considered indications for surgery in nonspecific ulcerative colitis. These indications may be absolute or elective. Fulminating, diffuse, toxic ulcerative colitis with distension of the colon is certainly one of the absolute indications. Massive uncontrollable hemorrhage, perforation with peritonitis and carcinoma are also indications for immediate surgery. In this area, I believe most internists and most surgeons agree. However, there is some difference of opinion in regard to the indications for elective surgery. These are often described as unremitting disease of two or more years, repeated intestinal hemorrhage and persistent anemia, diffuse uncontrollable skin disease, such as pyodermia, progressive deforming rheumatoid arthritis or spondylitis, and including suppurative arthritis, ocular disease and uncontrollable disabling anorectal disease with fistula formation, abcesses and incontinence. Other chronic disabling complications are often of sufficient severity to suggest surgery. It is difficult to assess whether the operative indications vary with the internist or whether the number of patients going to surgery is influenced by the skill of the internist in treating ulcerative colitis. However, the variation in surgical indications may represent a tolerance on the part of the patient and the internist of mild, chronically disabling complications of this disease.

In acute, fulminating, toxic ulcerative colitis with colonic distension, early operation is indicated since otherwise the mortality rate is exceedingly high. Peskin and Davis report a 57 per cent medical mortality in this form of ulcerative colitis. They believe that early surgery is indicated but recommend that if steroids have been used in management, they be continued during surgery and postoperatively. With ileostomy alone, a mortality of 50 per cent is seen whereas the mortality rate will vary between 8 and 16 per cent with ileostomy and primary colectomy.

Recently Marshek and his group and Klein and his have recommended decompression by cecostomy and then subsequent colectomy, and feel that this gives the lowest mortality rate. In toxic dilatation of the colon, even with surgery, the mortality rate is high. Peskin has reported 15.9 per cent mortality; Bacchus reported seven patients, four of whom went to surgery with two deaths; and Lumb, seven patients, six of whom went to surgery with four deaths. In Marshek's series, of 11 surgical approaches, there was but one death although a severe postoperative course occurred in seven of the 11. The use of antibiotics has reduced surgical mortality, but prompt surgery must be undertaken, and the internist is frequently at fault for not getting these patients to the surgeon early.

Since carcinoma of the colon occurs in approximately 8 to 10 per cent of all patients with ulcerative colitis, and since it is prone to occur at an earlier age in ulcerative colitis, all patients with this disease must be carefully followed and evaluated. This is particularly important in those showing polyposis. Warren and Summers state that pseudo polyps in chronic ulcerative colitis do not become malignant but that only true polyps develop malignant degeneration. Bargen, however, feels that adenomatous carcinoma does occur in multiple sites. Usually carcinoma does not develop until the ulcerative process has been active for some 10 years. Acute massive hemorrhage is an obvious indication for surgery. Perforation with peritonitis does not always require surgery for spontaneous healing may occur. However, it is usually an indication for early surgery.

With continuing steroid therapy, antibiotics and other methods of supportive treatment, ileostomy with primary colectomy is the surgical method of choice. Ileostomy alone has a higher mortality than colectomy, and the complications of the remaining colon in terms of malignancy, hemorrhage and perforation occur in 41 per cent. Bargen reports 46 per cent deaths within one year and 43 per cent of patients requiring stomal revision. Attempts to do low ileorectal anastomoses, in our opinion, have not been satisfactory. After many months of leaking suture lines, pelvic peritonitis and draining fistulae, one becomes discouraged with this type of procedure. While ileorectal anastomosis would seem ideal, the literature does not support the efficacy of this procedure.

Mayo and Broders reporting on ileoproctostomy found that 50 per cent of their operated patients had more than five stools a day and had complications of fistulae, rectal polyps, reactivation of the disease in the rectum, and obstruction. Alett reporting from London on 47 patients, reported a 4 per cent mortality with the same postoperative complications as reported by Mayo. They report that 70 per cent of their patients were reestablished in full health and regained weight and noted that the stools did not exceed six daily. However, 15 per cent of their patients had seven to 10 stools daily, and a smaller percentage showed more than 10 stools a day. With the advances in surgery and particularly in the preparation of a good functioning ileostomy, it would seem that ileorectal anastomoses would be reserved for a small carefully selected group.

The statement is frequently made in the literature, following both medical and surgical management of ulcerative colitis, that a certain percentage of patients variable with the authors, return to good health, gain weight and return to active life. However, if one uses the concept of maximum health, few of these patients, either treated medically or surgically, can be said to regain total health. It has been our experience that these individuals, aside from the local complications of their disease process, do not return to maximum health. Removal of the diseased colon does not remove the disease, for as Shields Warren has pointed out, ulcerative colitis is a systemic disease. These people are constantly disturbed by a variety of ailments, urinary tract infections, respiratory tract infections, a poor resistance to stress generally, and subsequent operative procedure usually results in numerous complications. These people, even with normal blood counts and with normal weight, continue to have poor skin coloring, emotional instability, and an inability to cope with the stresses of life. Whether this is the original psychologic personality or whether this is a part of the generalized disease process is difficult to assess. The awakened interest in this disease and its continued study may bring us the answers to many of these problems.

CONCLUSION

In conclusion, nonspecific ulcerative colitis is a disease of unknown etiology although the evidence at present indicates that it is a systemic disease, as indicated by widespread complications, probably associated with some type of hypersensitivity reaction. The pathology of ulcerative colitis remains obscure in its early phases and probably represents several modes of onset producing different initial lesions. The treatment, while markedly improved by the introduction of antibiotics, chemotherapeutic agents and steroids and improved surgery, is not entirely satisfactory, and present treatment does not appear to be the final answer.

BENJAMIN F. SMITH, M.D., ***St. Louis***

Maternal Welfare Committee Report for 1959

The Maternal Welfare Committee is divided into an Eastern and a Western section. The secretaries of these two sections alternate in giving the annual report. It is my privilege this year to give the report for the fiscal year 1959, which includes the deaths occurring from November 1, 1958 through October 31, 1959.

I would imagine that there are few who have seen more than one or two maternal deaths in our own practices, for if one delivers an average of 300 babies a year, one would see only one maternal death every eight or nine years according to the present death rate. Obviously one cannot gain any great insight into the problem of maternal deaths based on an individual practice. Yet when the deaths in the whole state for one year are studied one sees that there are definite problems and many areas in which improvement can be made. Such is the value of a study of this kind.

In order to review briefly, a maternal death is births in Missouri. During this time there were 46 maternal deaths which were attended by M.D.'s or were coroner's cases. There were some deaths attended by osteopaths but this number is not known. In the past we have calculated the maternal and obstetrical death rate for M.D. attended patients per 10,000 live births. This procedure will be followed in this report.

In order to review briefly a maternal death is one in which a woman died of any cause during pregnancy or within three months following the termination of that pregnancy. An obstetric death is one occurring during that same time period in which the pregnancy played a direct role in the death.

I have mentioned that there were 46 maternal deaths. Of these, 26 were obstetric deaths and one was not classified. I am happy to report that this represents a slight decrease from the previous year. Let us look for a moment at the statistics for the present year and the five years preceding it. It will be noted in table 1 that the maternal death rate for 1959 is 4.6 per 10,000 live births or a fraction more than one death for every 2,500 live births. The obstetric death rate as shown in table 2 is 2.6 per 10,000 live births or approximately one per 3,800 live births. These figures seem low at first glance but when one realizes that in the United States as a whole there were probably between 2,000 and 3,000 maternal deaths in 1959, one knows that the rate must continue to be reduced.

Before specific causes of death are discussed, let me mention some more general statistics. Of these 46 maternal deaths, 30 were white, 15 Negro, and one Mexican. Forty-two were married, two single, one divorced and one separated. Four were under the age of 20 and five over 40. Six were primipara and 40 multipara. As far as the stage of gestation is concerned, 30 were full term, seven between 20 and 37 weeks and nine less than 20 weeks. There were 31 deaths in the metropolitan areas of St. Louis and Kansas City, and 15 occurred in the smaller cities and rural areas. Eight patients died at home or were dead on arrival at the hospital. Of the 38 patients actually admitted to hospitals, 34 lived more than four hours after admission and three lived more than four hours following delivery. One can see that there was usually ample time to begin treating these patients.

The Committee on Maternal Welfare of the Association, divided into an Eastern and a Western section, studies maternal mortalities in the state each year and reports at the time of the Annual Session. This is the report for the year 1959.

Seven patients were delivered by cesarean section and there was one postmortem section with a living baby. Ten patients died undelivered. Of the 46 maternal deaths, 17 died without any consultation. There were six patients who died in hospitals in the large metropolitan areas who had no consultations. Twenty-nine patients had 42 consultations. The autopsy rate was 61 per cent. This could be improved.

Now let us look at the non-obstetric maternal deaths, i.e., those in which the pregnancy was not considered to play a direct role. There were 19 of these patients. Three died of cerebral hemorrhage—one of these from unknown cause and two from ruptured cerebral aneurysms. Two died from pulmonary emboli—one postoperative-

TABLE NO. 1

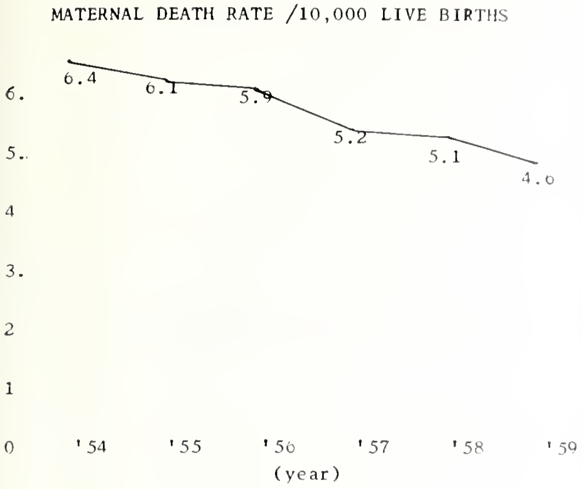
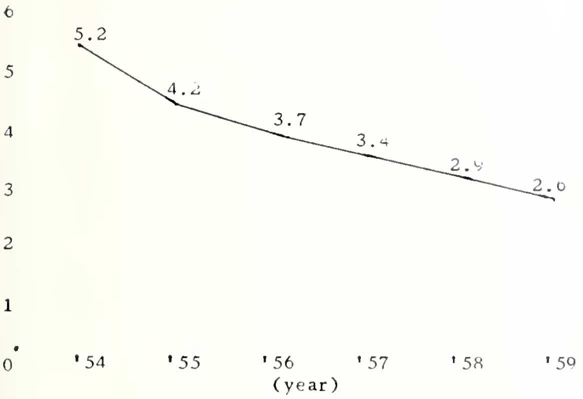


TABLE NO. 2



ly after a Wertheim hysterectomy for carcinoma of the cervix, and one 65 days postpartum. Two died from lupus erythematosis and two committed suicide. One died from each of the following causes: thrombocytopenic purpura, ruptured appendix with peritonitis, postoperative hemorrhage following operation for carcinoma of the colon, cardiac death, cause unknown, carcinoma of the breast with metastases, spontaneous air embolism in first trimester, brain tumor, ruptured aorta, acute yellow atrophy of liver following transfusion reaction, poliomyelitis with respiratory paralysis.

As one can see, these patients had many serious medical and surgical diseases which occur independently of pregnancy.

There was one maternal death which could not be classified further. This was an acute cardiac death in a patient who had no prenatal care.

Twenty-six deaths were classified as obstetric. Of these, five were called not avoidable. These five patients died of the following causes: Two had pulmonary emboli—one due to amniotic fluid and one occurred 56 hours postsection. One died of peripheral vascular collapse due to adrenal insufficiency, and one of a cerebral hemorrhage due to thrombocytopenic purpura. The fifth died of an E. coli septicemia due to an amnionitis following premature rupture of the membranes. The circumstances in these deaths were such that they were considered not preventable.

This leaves 21 obstetric deaths which were preventable or had avoidable factors. These deaths are, of course, the ones in which we are most interested because this is the area in which most rapid improvement can be made.

Theoretically these women could have been saved had they received ideal treatment under ideal circumstances. It is obvious that hindsight is better than foresight. In studying these patients attempt was made to point out avoidable factors and to assign these factors to the patient, physician, hospital, community, or a combination of them. This is not intended to imply negligence but is done for its educational value and to point out the areas in which attention should be focused. In these 21 deaths the physician was assigned responsibility alone in nine instances and shared responsibility with the patient and/or the hospital in nine instances. The patient was considered responsible alone in three instances and shared responsibility in five cases. The hospital shared responsibility with the physician in four cases.

Let us briefly examine the reasons for these assignments. The hospitals were given responsibility for failure to have adequate anesthesia facilities, failure of the house staff to notify the attending physician of the patient's condition, failure to have adequate consultation requirements, and because one hospital was called poorly staffed, poorly equipped and had no blood bank. This particular hospital is in a large metropolitan area.

The patient herself was assigned responsibility principally for failure to seek medical care and for criminal abortions. The physicians were assigned responsibility mostly because of errors in judgement and delay in starting treatment.

Now let us see the causes of death in these 21 avoidable obstetric deaths. As might be expected, hemorrhage still is the leading cause. In

10 of these 21 patients, uterine bleeding was either the only factor or at least a major factor in their deaths. In three of these 10, afibrinogenemia was a factor in the blood loss. In three cases a ruptured uterus was the cause of the hemorrhage. One of these was a ruptured cornual pregnancy, one a ruptured cesarean section scar in a patient in labor for 18 hours, and the third a rupture after injudicious use of pitocin and a breech extraction. The other causes of blood loss were uterine atony, inverted uterus and placenta praevia with acreta. In one there was no cause found. In all it was felt that the blood loss was inadequately replaced or that the cause of the hemorrhage was inadequately treated.

Infection continues to play a large role in obstetric mortality. Four patients died of infection. Two of these were due to septic abortions, one spontaneous and one self-induced. The third died of a pulmonary embolus which was preceded by an endometritis and pelvic vein thrombosis. The fourth patient had an amnionitis and septicemia. In at least one and possibly two of these patients, septic shock or the so called generalized Schwartzman reaction was present. More of these cases have been seen recently. Because of this the St. Louis Maternal Welfare Committee has made recommendations for the care of patients with ruptured membranes. These suggestions and a further study on septic shock will be presented in the near future by one of the members of the Committee.

Toxemia is still a major cause of death. There were four patients in whom this played a part. In one an eclamptic toxemia was the sole cause of death. In another a hypertensive toxemia contributed but hemorrhage was the main cause. In the third a severe pre-eclampsia was a contributory factor in the cerebral hemorrhage which killed the patient. In the fourth instance a severe pre-eclampsia contributed to the congestive heart failure which was the cause of death.

The five remaining cases all had different causes of death. One was due to a peripheral vascular collapse, cause unknown, and one to an acute cardiac failure in a patient with no prenatal care. The third was an anesthetic death due to aspiration of vomitus while under inhalation anesthesia for a cesarean section. The fourth patient died of an amniotic fluid embolus. This patient also had an afibrinogenemia but hemorrhage did not play a part in her death. The fifth and last patient died of a renal shutdown following a cesarean section and blood transfusion. There was no evidence to indicate the cause of the renal shut-down.

The different causes of death compared to those of the previous year are:

	1958 *Per Cent*	*1959* *Per Cent*
Hemorrhage	46	46
Toxemia	31	19
Infection	15	19

There are no startling changes in percentages. The toxemic deaths are down a little but this has happened in previous years only to rise again. The assignment of responsibility was distributed almost the same in 1959 as in 1958.

There are certainly many areas in which improvement can be made. According to the thinking of the Maternal Welfare Committees at the present time, the obstetric mortality should be only 0.5 per 10,000 live births instead of 2.6.

The area in which most improvement can be made is obviously that concerned with blood loss. Once again one must be reminded that all hospitals must have blood available. Physicians must use that blood and use it quickly when needed. Too often patients died simply because blood was not ordered and given when it should have been. Physicians must also constantly remind themselves of the situations in which hemorrhage is likely to occur and be prepared ahead of time. Fibrinogen must be available.

With regard to toxemia the answer seems to be alertness to the early diagnosis and early treatment of it. Education of patients to the extent that they seek good prenatal care is certainly important.

With regard to infection, one must, of course, be aware of the situations in which infection is likely to occur and when it does occur treat it promptly with adequate doses of the proper antibiotics. It is my impression that having antibiotics available has made for carelessness in sterile technies.

The Maternal Welfare Committees have a great deal of educational value. I know that every member who attends the meetings is a better physician because of it. It is wished that more people would attend the meetings. I believe that whenever possible the committees should present programs at hospital staff and medical society meetings.

It is hoped that the maternal and obstetric death rates will continue to fall in the next years and that the Maternal Welfare Committees will have some part in this achievement.

EUGENE B. ROBICHAUX, M.D., *Excelsior Springs*

Effective Control of Long-Term Anticoagulant Therapy

The need for national clinical standardization of the technic of prothrombin time determinations is stressed. Various products and methods of standardization are presented.

Dr. Robichaux is a graduate of Tulane University College of Medicine. He is associated with Drs. E. C. Robichaux, George E. Sanders and Ralph L. Nicholson and some of the testing was done in their office.

Scientific proof of the efficacy of long-term anticoagulant therapy has been presented by many leading men in cardiovascular disease, but their enthusiasm failed to reach the rank and file of medical practice because of the chaotic thinking which persists in relation to the problem of laboratory control. And it is for the promotion of standardization of laboratory control that I submit this article.

I believe that first consideration in the control of the long-term patient lies in the selection of a drug which presents the ultimate in predictable response, a lack of accumulative effect having minimal side reactions, and being sensitive to changes in dosage, or, if need be, the administration of Vitamin K_1. In my hands Anisindione,[a] Acenocoumarin,[b] Phenindione[c] and Warfarin Sodium[d] have proven most acceptable. It is advisable to acquaint oneself with the use of at least two anticoagulant drugs so that they may be changed in the event of side reactions.

The matter of selection of a patient for use of anticoagulant therapy is of utmost importance. The patient must be cooperative; he must know the effects of the drug, and of its possible dangers. He must be instructed in the safeguards to be applied for proper control. The contraindications of anticoagulant therapy are well known and will not be referred to in detail, as for example, in certain diatheses associated with hemorrhage, and congestive heart failure with its accompanying liver stasis. These would act as active deterrents to its use, or, at least, would demand close surveillance.

Recognition should be given to the work of research men in this field, utilizing both the one-stage prothrombin determination, and the two-stage prothrombin determination. Olwin[1, 2] suggests that the two-stage prothrombin assay be utilized in controlling a patient on anticoagulant therapy. Although the two-stage assay is an excellent assay, and, indeed, gives one a quantitative measurement of the prothrombin present in the plasma, it is time consuming and requires several standardized reagents. In addition to the depression of prothrombin, Factors VII, IX, and X are also depressed by many of the anticoagulant drugs. The measurement then of the prothrombin concentration alone will not permit one to calculate the depression of the other factors which may vary from patient to patient. I, therefore, feel that the general use of the two-stage method will not play an important role in the general control of long-term anticoagulant therapy. Quick[3] says the principle of the two-stage method continues to serve as an important tool for research in coagulation. It should be kept there and not allowed to enter into the present standardization procedure.

The need of control for the purpose of determining activity and sensitivity of the particular thromboplastin to be used in the one-stage prothrombin test has been generally emphasized. It is, indeed, essential for that not to vary in excess of one second in any laboratory. I advocate the development of a commercially available new second control, of a lyophilized, dicumarized plasma sample, with a reading within the therapeutic range of about 32 seconds. A variation of one to two seconds would be satisfactory in the daily laboratory determination on this control. This would serve as an ideal daily check on the accuracy of the entire technic of the individual laboratory.

A generally acceptable method of expressing the results of laboratory data is a prerequisite for national standardization, and in that connection it seems quite natural and easy to say that this should be prothrombin time expressed in seconds. Actually, what is really measured is the effect of several clotting factors, which are affected by such drugs as have been related, on Prothrombin, Factor VII, Factor V, and Factor X (the Stuart-Prower factor), and the results are measured in seconds. The method of preparing dilution curves and reporting prothrombin time in percentage of normal is based upon the dilution of plasma with normal saline solution, or with prothrombin free plasma. In using saline solution as a diluent there is unequal dilution of the various clotting factors needed for conversion of prothrombin to thrombin. As a result it is unrealistic to compare the clotting time of the patient's plasma with artificially diluted plasma. With relation to dilution with prothrombin free plasma it is reported by Flynn[4] that no one as yet has been able to prepare a prothrombin free plasma which is completely normal in other respects.

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[a] Miradon—Schering Corporation.
[b] Sintrom—Geigy Pharmaceuticals.
[c] Hedulin—Walker Laboratories, Inc.
[d] Coumadin—Endo Laboratories, Inc.

The one-stage prothrombin time procedure was available in the 1930s. Since that time many developments in the field of coagulation have occurred. The major factors here are concerned with the one-stage prothrombin time determinations, and these have led to the discovery of accelerator activity in plasma and thromboplastic materials. Now, the reexamination of these becomes mandatory since anticoagulants do not affect prothrombin only, but certain levels of accelerator factors also, particularly Factor VII (proconvertin).[5]

The discovery of Factor V (proaccelerin, labile factor) and Factor VII (proconvertin, stable factor) are documented in many places today. Factor V was originally discovered by Owren.[6] Factor VII was originally described by Alexander.[7, 8] The effect of anticoagulants in reducing proconvertin activity, as well as prothrombin activity, is also well documented. This was reviewed by Allington.[9]

The fact that thromboplastic materials contain accelerators was found to an increasing extent in recent years, particularly by Wright[10] and by Quick.[11] From this documented material it is obvious that: (1) anticoagulants change Factor VII activity in plasma; and (2) thromboplastin may contain a Factor VII-like activity. In order to have a true picture of the state of these activities in the patient's plasma, it is necessary to have a thromboplastin which does not contain accelerator activity. If one adds accelerator activity to the thromboplastin of the plasma being tested, one is not measuring the true state of the plasma but producing the dual effect of what is being added to what already exists.

The main characteristics that must be considered in a thromboplastin are its stability, its lack of accelerants and inhibitors, the nature of its response to the complex system that is being measured and, finally, its exact duplication. If one is dealing with an unstable thromboplastin the results are variable, and one is not able to adequately follow the clinical course of a patient on anticoagulant therapy. Duplication, therefore, is of the essence, and each lot of thromboplastin must not allow a significant deviation for, otherwise, anticoagulant therapy becomes a matter of conjecture and not one of laboratory direction.

The presence of accelerator activity in a thromboplastin would of necessity give one a false reading of the occurrences in the patient's plasma. With the discovery of Factor X (Stuart-Prower factor), and Factor VII (proconvertin), it becomes clear that Factor VII is necessary for hemorrhagic hemostasis; whereas Factor X (Stuart-Prower factor) plays a role in plasma coagulation without relation to tissue. Any reagent that adds to it a Factor VII-like activity invites the potential problem of hemorrhage without any previous notice of such possibility. Existence of inhibitors in thromboplastin would similarly give one false ideas of contrary action to the effectiveness of anticoagulant therapy. Existence of plus amounts of inhibitors in thromboplastin could lead one to believe the patient is in an optimum level of anticoagulant therapy, when the true picture in the patient's plasma is otherwise. From the point of view of the measurement of prothrombin time, if one is dealing with a reagent that gives a different result in a normal plasma as contra-distinguished to the plasma from an anticoagulant treated patient, one is introducing errors which of necessity are reproduced in errors of therapy.

A thromboplastin should be readily and quickly soluble. It should not require any other preparation, or manipulation, than the necessary reconstitution of the material. The thromboplastin must have an easily discernible endpoint, which is the same in all patients, whether of normal physiology or of an anticoagulant treated patient, or of one having hemorrhagic diathesis, or congenital deficiency in the clotting mechanism.

First: Stability.—Stability can be tested by comparing the prothrombin times of a standard control with its results on normal plasma and those from anticoagulant treated patients. These should be compared after a period in storage. The determinations at the beginning of the experiment, and at the end of the storage period, should not differ substantially from each other.

Second: Choice of Endpoint.—In order to test the endpoint, one should perform prothrombin time tests on normal plasma and anticoagulant treated plasma; or on various dilutions of a standard plasma or standard. The same endpoint should be easily readable on all of the different plasma or dilutions. One can compare the time it takes for the first appearance of an enhanced granulation in the various plasmas, or the time it takes for a fibrin clot to form. The latter may be found to be impossible in the anticoagulant treated plasma. It is desirable to maintain the same endpoint so that the problems introduced by variations in fibrin polymerization are eliminated. If one chooses the first appearance of granulation as the endpoint, then this endpoint will appear the same in normal or anticoagulant plasmas.

Third: Duplication.—By employing several batches of a thromboplastin, a single prothrombin time standard or normal plasma, one can measure the prothrombin time of the different batches of thromboplastin. These should not have a variance of more than one second.

Fourth: Freedom from Accelerators—How to determine the freedom of accelerators in a plasma is an easy matter. If one measures the prothrombin time of plasma taken from an anticoagulant treated patient against a prothrombin time of the same plasma with the addition of a small amount of aged serum (a source of Factor VII), and records a large time differential between them, one can be sure of the absence of accelerator activity in the thromboplastin under consideration.

We have found one commercially available thromboplastin having all the advantages related, namely, Thromboplastin (1), (Acuplastin). Dr. Irving S. Wright[12] agrees with this in a prepared statement for use in a previous report.[13]

To further document the theory that only thromboplastins having the criteria as outlined are adequate, Caldwell and Priest[14] did extensive studies on 486 samples of blood plasma, most of which were examined by three different preparations: Thromboplastin (1)[e] (Acuplastin) Thromboplastin (2)[f] (Bacto-Thromboplastin), and Thromboplastin (3)[g] (Simplastin). It was found that Thromboplastins (2)[f] and (3)[g] both gave consistently much shorter prothrombin times than did Thromboplastin (1).[e] Specifically, Thromboplastin (1)[e] gave prothrombin times which were always more prolonged, and several in each group were completely out of range; for example, of 28 examinations showing 28 second value with Thromboplastin (3),[g] Thromboplastin (2)[f] gave values of 19 to 23 seconds, and with Thromboplastin (1)[e] of the same 28 examinations 25 of them ranged from 29 to 48 seconds, with one prothrombin time of 50, another of 57, and another of 75 seconds.

I have previously reported[13] a study of 105 samples of blood plasma, which were tested separately in two laboratories, namely, our office and that of the Excelsior Springs Hospital, both well equipped and competently staffed. These samples were collected and tested within the hour after being taken. The thromboplastin preparation used was Thromboplastin (1).[e] And while the results of that study shows excellent near duplication of effort it should be stressed that the rigid control cited must be diligently carried out for its success.

We use the Link-Shapiro modification of the one-stage Quick test, and emphasize the following points. (1) Use only clean, dry glassware; (2) make a clean venipuncture, preferably using a 2 syringe technic; (3) mix 4.5 ml. of blood with 0.5 ml. of 0.1 M sodium oxalate solution immediately and gently; (4) centrifuge at once; (5) remove plasma, test immediately, or within four hours, if plasma is stored in ice; (6) follow manufacturers instructions for reconstituting the thromboplastin; (7) regulate water bath temperature carefully to 37 degrees, and provide mixing device so that there is a uniform temperature throughout the bath; (8) place thromboplastin and plasma in water bath for five minutes before use; (9) measure the amounts accurately and discharge plasma forcibly directly into the thromboplastin; (10) keep the tube containing the thromboplastin and plasma in the water bath for at least one-half of the expected prothrombin time; (11) perform all the tests in triplicate, and unless results are within 0.5 of a second agreement on at least two of these tests repeat the procedure; (12) read endpoint by adequate standardized light; (13) standardize the entire technic.

I advocate uniformity of thromboplastin, likewise uniformity of nomenclature; also of technic and the expression of *prothrombin time in terms of seconds.* I suggest the therapeutic range of 25 to 38 seconds; and since using the procedure

(*Continued on page 1262*)

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[e] Acuplastin—Ortho Pharmaceutical Corporation.
[f] Bacto-Thromboplastin—Difco Laboratories.
[g] Simplastin—Warner-Chilcott Laboratories.

CYRIL COSTELLO, M.D., *and*
LOUIS F. AITKEN, M.D., *St. Louis*

Carcinoid of the Duodenum

A Case Report

In 1957, Guy W. Horsley and B. N. Golden[1] reviewed the world literature on duodenal carcinoids and reported that there were 17 authenticated cases in the literature and added two of their own for a total of 19 cases. Following is another case of duodenal carcinoid which has been under our management and which we are presenting not only because of the rarity of these cases in the literature but also because of interesting diagnostic features.

Case Report

Mrs. C. B., a 46 year old, white, married female, was admitted to Barnes Hospital on February 29, 1960, complaining of diarrhea of three years duration and of hot flushes accompanied by tachycardia, palpitation, dyspnea and headache of four to five months duration. These attacks were described as "Lightning attacks" in which the patient experienced a sensation of blood rushing to her head and a feeling that "the roof of the head will come off." Her symptoms began following a trip to Florida three years previously, and her diarrhea persisted with seven to 10 loose to watery stools daily and resulted in a weight loss of from 126 to 96 pounds. In August 1959, she entered another hospital where it was noted that she had hepatomegaly with her liver palpable two finger-breadths below the costal margin and anemia with 11.8 gms. of hemoglobin per 100 cc. (79 per cent). Her bromsulfalein test revealed no retention of dye at the end of one hour. Her stool was negative for parasites and ova. Gastrointestinal x-rays revealed a shortening of the small bowel and a coarsening of trabecular pattern throughout. The appearance was considered to be that compatible with non-tropical sprue. Her stool contained 37 per cent of fat in the dry weight. An intubation biopsy of the third portion of the duodenum showed normal villi with a small ulceration in one area of unknown significance.

The patient at that time declined surgical exploration and was put on a gluten-free diet and discharged. She experienced no improvement on this diet and her flushing with severe headaches became steadily worse.

After returning home, she began noticing that her menstrual periods were becoming irregular with diminished flow.

Upon admission to Barnes Hospital in February 1960, her weight was 99 pounds and she complained of tiredness and weakness in addition to her diarrhea and flushing. Her blood pressure was 140/95, pulse was 100 per minute and respirations were 20 per minute. Flushing of the face was noted as she laid down after being up for ten or more minutes. There was a precordial grade III systolic, blowing murmur which subsequently disappeared. The liver was enlarged two finger-breadths below the costal margin and there was diffuse, mild tenderness throughout the abdomen and a fluid wave was elicited. Rectal and pelvic examinations were unrevealing.

A twentieth case of carcinoid of the duodenum is added to the literature, according to a study made in 1957 at which time there were 19. A report of a case is presented together with discussion of the clinical features and differential diagnosis.

Drs. Costello and Aitken are connected with the Departments of Surgery and Medicine of Washington University School of Medicine and Barnes Hospital, St. Louis.

Her hemoglobin measured 9.2 gms. per 100 cc. Her red blood cell count was 3.5 million and her hematocrit was 31 per cent. Repeated examinations of the stool were negative to benzidine for blood, negative for neutral fat and negative for parasites and ova. A Diagnex test revealed presence of free hydrochloric acid in her stomach, and examination of the urine revealed a positive test for 5-hydroxyindole acetic acid (5-H.I.A.A.).

The patient was given 1,000 mcgms. of vitamin B_{12} intramuscularly daily, and her stools diminished from 10 to three daily for several days and then promptly returned to 10 or more per day. Her hemoglobin level was elevated to 12.9 gms. per 100 cc. after the administration of two units of blood.

Examination of her intestinal tract by x-ray revealed no abnormality with the exception of dilatation of the second portion of the duodenum to the region of the superior mesentery artery which was consistent with a mild superior mesenteric artery syndrome (fig. 1). Barium was seen to pass this point but was held up temporarily.

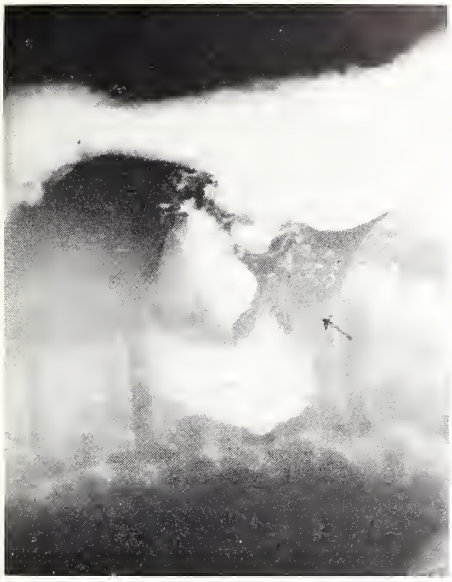


Fig. 1. Arrow indicates a defect in the third part of the duodenum produced by the carcinoid tumor. Barium was delayed in passing at this point but was not completely obstructed.

The patient was explored surgically on March 24, 1960. The significant findings were a confirmation of the preoperative diagnosis of carcinoid tumor of the small intestine, 1,000 cc. of free fluid in the peritoneal cavity and metastases to the liver and mesentery. Its origin was in the third portion of the duodenum where it had produced the defect noted in the barium series and from whence it extended by continuity into the root of the small bowel mesentery as dense infiltration. There were multiple nodules, approximately 2 cms. in diameter, scattered throughout both lobes of the liver. Biopsy from the liver tumor and from the tumor in the small bowel mesentery confirmed the diagnosis of carcinoid.

In order to postpone further obstruction in the third portion of the duodenum, a duodenojejunostomy and bilateral vagotomy were performed. The patient made an uneventful recovery.

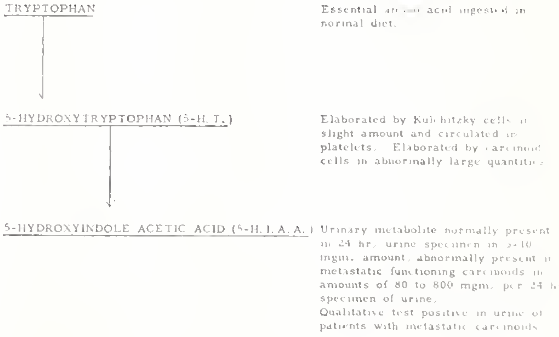
Much has been learned and written about carcinoid tumors since 1955 when the breakdown of 5-hydroxytryptamine to 5-hydroxyindole acetic acid was discussed by Erspamer,[2] and an increase in the amount of 5-H.I.A.A. in the urine of patients with carcinoid tumor was demonstrated by Page[3] and by Sjoerdsma, Weissbach and Udenfriend.[4] Much impetus was given to study of carcinoids by Sjoerdsma, et al., in 1956, by their investigating the metabolism of tryptophan in this syndrome and by their methods of measurements of 5-hydroxytryptamine in the serum and its breakdown product 5-hydroxyindole acetic acid in the urine.

Lubarsch,[5] in 1888, recognized these growths as differing from other varieties of gastrointestinal neoplasms and referred to them as "little carcinomas." In 1907, Oberndoerfer[6] differentiated these tumors from carcinoma and designated them "carcinoids." They are also referred to as argentaffinomas because of the silver reducing granules most of them contain. The most generally accepted theory is Masson's, that they arise from the argentaffin cells of the intestine. Gosset and Masson[7] demonstrated that the cells of the carcinoid, like the Kulchitzky cells that occur normally in the crypts of Lieberkuhn, contain cytoplasmic granules which will reduce an ammoniacal solution of silver nitrate and stain darkly. It is now well established that they are true cancers and do metastasize.

The Kulchitzky cells are located in the crypts of Lieberkuhn throughout the gastrointestinal tract from the cardia to the anus. Some believe that the segmental distribution of carcinoid tumors in the gastrointestinal tract varies in proportion to the number of these cells found in a given area. They most frequently are found in the appendix and then with decreasing frequency in the terminal ileum, the jejunum, the rectum, the colon, the cecum, the stomach, the gallbladder and the duodenum. Eighty-five to 90 per cent of carcinoids arise in the appendix or the ileocecal region.

In recent years there have been increasing reports of a new syndrome consisting of metastatic carcinoid, flushes, chronic diarrhea, respiratory distress and valvular heart disease.[9, 10, 11]

The exact mechanism involved in the production of these changes is a matter of conjecture but it is probable that carcinoid cells elaborating abnormal amounts of serotonin (5-hydroxytryptamine) are responsible (fig. 2). It is increasingly believed that these tumors secrete abnormal amounts of serotonin (5-H.T.) similar to the abnormal secretion of epinephrine and non-epi-



TRYPTOPHAN
Essential amino acid ingested in normal diet.

5-HYDROXYTRYPTOPHAN (5-H. T.)
Elaborated by Kulchitzky cells in slight amount and circulated in platelets. Elaborated by carcinoid cells in abnormally large quantities

5-HYDROXYINDOLE ACETIC ACID (5-H. I. A. A.)
Urinary metabolite normally present in 24 hr. urine specimen in 5-10 mgm. amount, abnormally present in metastatic functioning carcinoids in amounts of 80 to 800 mgm. per 24 hr specimen of urine.
Qualitative test positive in urine of patients with metastatic carcinoids

Fig. 2

nephrine by functioning pheochromocytomas. That the abnormal quantity of 5-hydroxyindole acetic acid (5-H.I.A.A.) in the urine of these patients is the metabolite of tryptophan absorbed by the carcinoid cells has been demonstrated.[4] The functioning carcinoid cells have an affinity for the essential amino acid, tryptophan, which is converted into serotonin (5-H.T.) and is circulated through the blood by the platelets. Presumably the release of serotonin into the serum produces the flushes, diarrhea and respiratory distress. More difficult to explain is the sclerosis of valves of the right side of the heart. It is assumed that it is produced by the 5-H.T., since 5-H.T. is at least partially destroyed as it passes through the lungs, thus exposing the right side of the heart to higher concentrations than the left. In one case of carcinoid with metastases, the concentration of 5-H.T. was 5.6 mcgms. per ml. in the pulmonary artery but only 0.9 mcgms. per ml. in the brachial.[12]

CLINICAL FEATURES

The flush starts in the face but may extend to the chest, arms or legs. It may be only occasional or occur many times a day and may last as long as seven to eight minutes. With time, the skin may develop patches of cyanosis and telangiectasis.

Diarrhea with 10 to 20 watery stools daily is a frequent symptom. In some cases a curious asthma-like dyspnea is a troublesome symptom.

Late in the disease, the pulmonic and tricuspid valves become vascularized and sclerotic, thickened and distorted.[13] Ultimately, the tricuspid valve becomes stenotic and incompetent.

DIFFERENTIAL DIAGNOSIS

In the differential diagnosis, one must consider the various causes of chronic diarrhea as well as the various causes of episodic flushes, although the combination of the two with the presence of 5-hydroxyindole acetic acid in the urine simplifies the diagnosis. The recognition of 5-H.I.A.A. in the urine in abnormal quantities is apparently pathognomonic of this disease and the qualitative test[8] can be performed in any laboratory.

The fact that this patient was nearing the menopausal age and was developing menstrual irregularities during the recent months of her illness led to the consideration that her flushes may have been on a menopausal basis. However, her flushes (as characteristic of carcinoid flushes) were more severe, more frequent and more constantly associated with severe headache than are menopausal flushes. The diarrhea was considered to be the result of such possibilities as regional enteritis, non-tropical sprue and parasites, as well as carcinoid. The absence of positive findings to support these diagnoses and the presence of 5-H.I.A.A. in her urine were ample evidences of the nature of her illness which was then confirmed by exploration and biopsy.

Of striking significance to us, this patient was relieved of her diarrhea and flushes postoperatively until she was fed a soft diet at which time violent diarrhea with 20 or more stools daily ensued. We postulated that her sequence of temporary relief and subsequent recurrence may have resulted from the variations of tryptophan ingested. She was therefore placed on a regimen of low tryptophan diet, and as expected, her diarrhea again subsided promptly. Further studies based on this observation are being made on this and other patients with known carcinoids and the results will be reported later.

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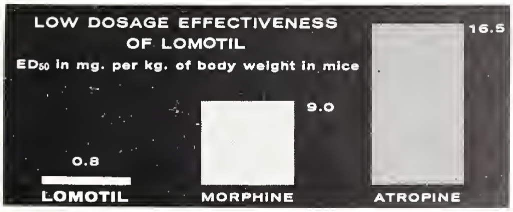

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EMIL E. BRILL, *St. Louis*

Why a "Must" Now?

A Special Article

This is one of three programs on aging presented before the Greene County Medical Society this spring. While this presentation was made on May 27 and references to the closing of Congress are now untimely, the discussions of the question of medical care of the aged and legislation remain timely.

Mr. Brill is Chairman, Missouri Committee for the 1961 White House Conference on Aging. Mr. Brill is Senior Vice President of the General American Life Insurance Company.

Last week, it was my pleasure to hear the American Medical Association's Executive Vice President, Dr. F. J. L. Blasingame, speak and hear him say, "A.M.A. feels very closely to you of the insurance health industry and is happy to be a member of the health team serving the American public." Tonight, as one of that team, reechoing Dr. Blasingame's sentiments, I want to visit with you and have us consider together matters of mutual concern.

Presently, the medical profession, industry represented by the United States Chamber of Commerce and the National Association of Manufacturers and their local organizations and the insurance industry are engaged in a tag team match with the proponents of governmental administered health insurance, characterized as the political "phenomenon of 1960."

At times, I know this engagement has been frustrating. Recently, I heard that frustration is what takes place when a man dreams that his wife and Marilyn Monroe are vying for his attention and his wife is winning.

What will be its outcome, staged as it is in the arena of an election year and with both parties publicly committed to programs differing widely in their character is as much your guess as it is mine.

But one thing I know for a certainty—that unless we keep in the ring calling upon all the strength we possess, using all the ingenuity we can marshal and coralling all the outside support we can command and working together wholeheartedly and cooperatively as a team, the judges, Congress, and the referee, President Eisenhower, if they do agree on a decision which under the existing circumstances will be in nature a compromise, it will not be the best possible one from the standpoint of the aged, the taxpaying public, the medical profession and the insurance industry. And whatever this decision may be, we must recognize that if some program is adopted we still have a job to do, working closely together, to keep its objectionable features from expanding and being extended to additional segments of the population.

In an election year, politicians are unduly solicitous about the aged for they represent a voting block of 15½ million votes—a block that consists of about one third of those who will vote for the next President of the United States.

This is so well revealed by the fact that major liberalizations in the social security legislation were voted successively in 1950, 1952, 1954, 1956 and 1958—all election years for the House of Representatives and for one third of the United States Senate.

Yes, our social security legislation has, as was so aptly said by E. H. O'Connor, Managing Director, Insurance Economics Society, "become a political football." He further stated, and I quote, "that unless the American people become aware of its implications and where it is headed, it could jeopardize the security of millions of individuals depending upon social security benefits for their future security."

When this Social Security Act was adopted, it was predicted by many that it would leave the sphere of a minimum subsistence level, as it was planned to be, and would become the vehicle for expanded benefits into many areas of social welfare, particularly in the field of interest to us, the health care field.

Let's recognize in this election year that politicians are for grandpa and grandma with many a candidate resorting to this type of political strategy:

"This candidate's program is different from others."

"He shakes hands with babies and kisses grandmothers."

That our representatives in Congress are for our matured citizens is convincingly indicated by the fact that 486 bills dealing with older citizens and having little direction were introduced in the first two months of the first session of the present Congress. I hold in my hand an analysis of these bills.

Cartoonists have given force to what I am saying. Here is a cartoon headed "Try My Rocker, Grandpa," which appeared in the *St. Louis Globe Democrat*. It shows the elephant and the donkey vying to place grandpa in their respective "health plan" rockers. Another appeared in the *St. Louis Post-Dispatch*. It shows grandma at the curb with Boy Scouts labeled "Stu," "Hu" and "Jack" anxiously awaiting the opportunity to help her across the street.

Here is another one that presents an "election year Congress" with a stethoscope in his hand labeled the "Forand Health Scheme" taking the soundings of the ballot box.

Don Hesse drew one styled "Liable to Start Trying That Quack." It pictures Mr. Citizen with his arm in a sling labeled "High Cost of Medicine and Care" and otherwise crippled approaching a door with this lettering: "Old Doc Cure-All," "Socialized Medicine," "Don't Worry About the Bill," "Welcome." Yes, this legislation is, talking in medical language, a prescription for votes.

A native from the hills of the Ozarks came to St. Louis to take a Civil Service examination for a mail carrier. He was handed a questionnaire to complete. When it came to the question, "How far is the distance from the earth to the moon" he arose from his writing desk, went straight to the examiner's desk and said "If this is the only route you have open, I don't want the job."

What we must do as we continue "wrestling" is to indoctrinate the public, our public, with the idea that the federal route is not the only one to be considered in dealing with the health problems of the aged, that

—there is the route of carrying health insurance provided by the insurance industry, the Blue Cross and Blue Shield types of organizations and other programs divorced from governmental intervention.

—that there is the route which you doctors and hospitals have paved with commitments to provide free or reduced cost service to those who do not have the means for financing it.

—that there is the route of old-fashioned thrift, the accumulation of assets during one's working years for availability to finance health care in the sunset years.

—that there is the route of the state's Old Age Assistance Programs for providing supplemental benefits to finance health care.

—that there is the route of community responsibility.

—that there is the route of individual and family responsibility.

Obviously, with the problems of the aged being so many, complex and interrelated, every available route must be considered in the working out of their solution and no one problem as that of the financing of medical care, should be singled out for preferred or exclusive attention, no more so than the problems of employment, income maintenance, education, housing, nursing home care, and the other problems presenting themselves in this field.

If we use these routes, there is no necessity for the creation of a welfare state.

I know you would like to know what the insurance industry is doing to establish a route that will be attractive to our citizen travelers and serve their purposes health-wise. Here is what it is continuing to do:

1. It writes its group health insurance policies so as to continue the coverage while an individual is actively employed regardless of his age. Doing this provides those 65 years of age and over with the same type of benefits while they remain employed as are made available to younger employees. It is estimated that more than 2,200,000 aged males and more than 830,000 aged females are employed and that a high percentage of these have health coverage comparable to the others in the employer organizations.

2. The insurance industry is willing to have its group health insurance coverage continued for the employee and his dependents during the employee's retirement period and encourages employers to set up their group insurance coverage on the basis of either so continuing the coverage without change or on a modified basis and with part or all of the premium paid by the employer. In an address made by C. A. Siegfried, Vice President, Metropolitan Life Insurance Company, on November 12, 1958, he stated that 99 per cent of the employees covered under group major medical care contracts administered by his company and 56 per cent of those covered under its group hospital expense

insurance policies were eligible to have their coverage continued during retirement. So under this program another large segment of our matured citizens have the benefit of health insurance coverage.

3. Many group health insurance policies provide when an employee retires and his insurance is terminated that it can be converted to an individual policy without medical examination. Recently, the New York legislature passed a law which makes it mandatory to include a conversion right in all group hospital-surgical policies issued in that state. The insured employees having this right of conversion have been increasing rapidly. Through the exercise of it, another group of aged have the benefit of health insurance and this number will greatly increase in the future because this has been but a recent addition to group insurance contracts.

4. A number of insurance companies recognize special groups of retired persons as qualifying for the issuance of group health insurance policies to cover their memberships. Among those protected are groups of retired school teachers, as the National Retired Teachers Association, Civil Service employees, members of Senior and Golden Age Clubs, various fraternal groups and retired employee associations, as the American Association of Retired Persons. Under group policies of this type, another sizeable group of oldsters are provided with health insurance coverage.

5. An ever-growing number of insurance companies continue individual health insurance policies issued beyond age 65. At least 175 companies do this. At least 110 will renew for life.

6. A growing number of insurance companies issue health insurance policies at advanced ages, some doing this up to 70 or 75 years, others to age 85 and some having no age limitation. I hold in my hand an advertisement which publicizes the Aetna issuing a health insurance policy to a lady 90 years of age. When this advertisement was exhibited in the company of a number of insurance men recently, one of my friends from the Connecticut General said, "We have done even better. We issued a health policy to a lady 91 years of age."

7. Today, a health insurance policy may be obtained which is financed on the same basis as limited payment life insurance with premiums payable for only a fixed number of years, after which the policy becomes paid up, with the protection continuing for the lifetime of the insured. Under these policies on an insured reaching age 65 he has fully paid up health insurance coverage. Obviously, because of the reduced payment period, these policies cost more than other types of plans, but have the advantage of letting a person pay for lifetime protection during the big earning years.

8. In recent years, there has come into being what is known as the "mass enrollment" approach. Under this program, enrollment periods in designated states are announced periodically by the insuring company, and during these periods those 65 years of age and over can secure health insurance without medical examination and regardless of medical history. Conditions existing before the contract is issued are covered after a short waiting period. Just one of the insurance companies which uses this approach enrolled more than 250,000 aged persons during 1959.

Under these programs, the coverage generally includes hospital care up to 31 or even 60 days for each confinement, the surgeon's fee and additional hospital services up to a maximum amount. Some plans cover convalescence or nursing home care. Many of our aged have taken advantage of these programs.

In addition to the insurance provided by the private insurance companies, the Blue Cross and Blue Shield types of organization provide health coverage to a large number of our senior citizens. Take the Blues in Missouri. None have an age restriction for either their group or non-group or direct pay programs for entrance coverage or for continuation of coverage. These were among the first Blues organizations in the United States to adopt this liberal program.

Thomas R. O'Brien, Executive Secretary, Missouri State Medical Association, estimates that about 140,000 of the over-age group in Missouri are covered by either the St. Louis or the Kansas City Blue Shield plans. Group Hospital Service, Inc., St. Louis, told me it has 95,000 participants who are age 60 or over and I was given the information by the Blue Cross organization of Kansas City that 18 per cent or nearly 85,000 of its insured membership are 65 years of age or over. There are other types of organizations furnishing coverage on a voluntary basis.

The greatest tribute that could be paid our present voluntary health insurance system was paid by Congress itself when it adopted the Federal Employees Health Benefits Act, effective July 1, employing that system to supply health insurance coverage for all federal employees, some four million in number. Significant is the fact that this program provides that those federal employees who are retired on and after its effective date shall have the same coverage at the same rates as is made available to the active working employees.

What have been the results of these voluntary insurance programs?

The Health Insurance Association of America estimates that 49 per cent of persons 65 years of age and over had some form of voluntary health insurance at the beginning of this year and that by May 1 this figure had reached 51 per cent.

In 1952, 59 per cent of the total population of the United States was insured. This increased to 72 per cent by January 1, 1960, or by 13 percentage points. For the aged, the proportion insured almost doubled during this eight year period, increasing from 26 to 49 per cent. In 1952, this 26 per cent represented 3,400,000 of the then 13,000,000 aged persons. The 49 per cent on January 1, 1960, consisted of 7,700,000 or more than twice the number of aged covered in 1952. So you will see that voluntary insurance among the aged has grown at a more rapid pace than the persons living beyond age 65. The coverage on those 65 years of age and over has also increased more rapidly than that carried by the population as a whole.

As one considers the uninsured aged group, it must be recognized that many cannot be considered as prospects for coverage because:

1. At present, 2,400,000 aged persons are receiving Old Age Assistance benefits from the states. These represent 15 per cent of the total 65 plus group. As such, these persons have a portion of their medical care cost, if not all, taken care of by government.
2. There is a group of aged who receive medical care without cost as veterans, seamen, members of religious orders or as professional courtesy.
3. There is another group that feel they have sufficient income or resources to finance any required medical attention.
4. There is a group because of religious beliefs which makes no provision for medical care.
5. There is a group which is institutionalized and are receiving governmental financial care.
6. And, lastly, there is a group which looks to their families to finance any medical service required.

So I think it can be safely said that 60 per cent or even more of the aged needing and wanting health insurance have some form of it. A recent survey by Health Insurance Foundation revealed that only 3 per cent of the aged interviewed had tried to purchase insurance and had been rejected.

With the results thus far achieved, you will see voluntary health insurance is covering a high percentage of those requiring and wanting coverage and as the upward trend has been accelerating that it can be expected that the percentage of aged needing and wanting health insurance will rise to 65 per cent by the end of 1960, to 80 per cent by the end of 1965, and to 90 per cent by the year 1970. The progress being made in making available improved and flexible types of coverage will be hampered or will stop entirely if the Forand type of legislation is adopted.

I have told you what the voluntary health insurance group is doing to make unnecessary governmental administered health coverage.

I now take the liberty of outlining what you as medical men can do to accomplish this objective.

First, you can reach your public, as a public relations man would say, and establish an atmosphere of understanding, that this public understands what will result from the involvement of the government in the providing of health care. What is your public? It is those you contact daily in your practice, those with whom you have business dealings, those you meet socially—anybody whom you contact. Yours is a large public and one that can be a persuasive force in your community, in our state and the nation.

Second, you can contact your Congressmen and give them your views about the Forand type of legislation. These representatives are much influenced by "grass roots" opinions reaching them for it is upon the satisfying of the greater majority of their constituencies that they must depend for reelection. I ask each of you, "Have you expressed your views about the Forand type of legislation to those who represent you in Congress?" You can bet dollars to doughnuts that those in the proponent's corner have seen that their public has done so. Actually, 60 per cent of the communications reaching Congress have favored the Forand bill while 40 per cent were against it. But, and I think this is significant, the 60 per cent were in the main printed post cards and form letters, while the 40 per cent were individually written letters. Again significant, only a small percentage of these letters and cards were written by the aged themselves.

Third, each of you can give reality to your national and state organizations' announced intention to see that no one requiring medical care without the ability to finance it goes without it. To you men in Springfield, do you give any of your time to the medical requirements of those in your county's home for the aged? The time, effort and thought you give to the furnishing of free medical care will be as nothing compared to that it will take to do the paper work alone required under a program of governmental regimentation or socialized medicine.

Fourth, you can see that health insurance is not abused; that it is used judiciously. I know it takes a selfless attitude and much courage to refuse to hospitalize a patient who requests it when you know the work can be done adequately in your office and without the involvement of the additional hospital confinement cost. I also know if you explain to a patient that by not admitting him to the hospital you are keeping his insurance cost down through assisting and preserving the adequacy of his premium rates, in most cases he will accept your explanation when sincerely made and you will not lose him to some other doctor. This would certainly be true if all the doctors in Greene County took a like position and the public understood this.

Fifth, when you fix your fees, let them be determined without any thought to the insurance coverage carried and be on the same basis as they would be if your patients alone were required to pay them. Be ever mindful that insurance does not create any new money; that it is merely a means of pooling money to protect people against the financial cost of injury or sickness when it occurs, that it only is expected to defray medical costs in the manner the patient would do if he had no insurance.

If you were sitting as a claim man in an insurance office, how would you feel about the following cases:

Case A: This involved a man in the lower middle income brackets and a hernia operation. The surgeon performing the operation submitted a bill of $1,000.00 and his assistant submitted one of $250.00. After consultation with a doctor in the area who was familiar with the operative work done, he gave it as his opinion that $700.00 would be the outside charge which should be made. When we confronted the doctor with this viewpoint, he and the assistant surgeon accepted aggregate payments of $800.00.

Case B: Included in the claim papers submitted to us was a funeral bill for $760.92 and evidenced that of this amount, $10.00 had been paid the minister for performing the funeral service. This indicated the financial status of the deceased. The operation performed was for carcinoma of the colon. The doctor doing the operative work submitted a bill of $1,750.00 and his assistant $250.00, total surgeons' charges of $2,000.00. The insured died the day following the operation. In this case, it was cheaper to die and be sent to Heaven than to live and be operated upon. When the financial status of the insured was brought to the attention of the doctors, as was indicated by the funeral bill, and the viewpoints of others were given as to the excessive character of the charges made for the operative work done, the two involved doctors reduced their charges to $1,100.00.

In insurance companies' files are other cases of this type which reveal there can be little question but that the existence of high amounts of insurance coverage influence the fixing of medical care charges.

In eleven states, relative value schedules adopted by medical societies for state-wide use are helpful in determining the reasonableness of charges made and the use of these by doctors has done much to reduce to a minimum cases of excess fees, particularly surgeons' fees.

Unless the medical profession sincerely carries out the obligation to keep its fees within reasonable bounds so that insurance can be provided at a price the public can pay, particularly the aged who require on an average much greater care than those under 65, health insurance will be priced out of the market and will inevitably be replaced by governmental promoted coverage.

Sixth, you can cooperate with those providing health insurance coverage by completing claim papers promptly and fully so as to allow for the carriers giving the most expeditious service possible. You can also do this as a service to your patient without additional charge, being mindful that if we have a governmental program you will be completing proof of claim papers voluminous in character without the right probably to charge for doing so.

As I spoke this evening, I was asked to give you my thoughts as to what labor wants and will demand in health insurance. This is answered by telling you that labor wants the Forand type of legislation.

On February 19, 1959, the AFL-CIO Executive Council adopted the following statement:

"We urge the Ways and Means Committee of the House of Representatives . . . to make hospital care and related benefits available through the mechanism of Social Security in ways that will promote good care, speed rehabilitation, and assist hospitals to meet increased demand for service."

Walter P. Reuther, speaking as president of UAW, AFL-CIO, said: "It is universally agreed that the specter of failing health and the cost of hospital and medical care is the greatest problem facing our older people. I therefore regard passage of the Forand bill as a much needed and positive step toward a better tomorrow for all senior citizens."

Thomas Pitts, secretary for California, AFL-CIO, says: "Federal protection for the elderly is only the first step to pave the way for universal coverage"—meaning comprehensive federal medical subsidies for every U. S. citizen.

I hold in my hand a UAW publication in which labor union members are briefed about the Forand bill and given a seven point program as to what they can do to get this bill enacted. Congressman Thomas B. Curtis of our state who courageously has led a fight against the Forand bill, stated before the House of Representatives on March 24, 1960, that he heard Mr. Reuther state in testimony before the Ways and Means Committee of the House, and I quote, "It is no secret that the UAW is officially on record as backing a program of national health insurance."

It seems unfortunate that such a political and pressure group inspired ground swell has occurred for governmental administered health insurance during the closing months of this session of Congress and it is being considered on an emergency basis. I say this for these reasons:

1. No national emergency exists today calling for this legislation any more than has existed the last several years. That there may be a problem some do not even concede, but no crisis. Four months ago precious few people had any knowledge of the Forand bill or its kind. When President Eisenhower presented his budget and State of the Union message to Congress in January, he did not consider this legislation urgent or even as a great political issue. Up until recently, this character of legislation did not have a prayer. This raises the question, "Why is it a must, now?"

2. Well recognized and actively functioning commissions and committees in every state are studying the problems of the aged and carrying on objective studies and surveys for presentation to the White House Conference on Aging in Washington, D. C., in January 1961. Congress should await the facts presented and recommendations made at that Conference for it would be ridiculous if there was a wide variance between any legislation it passed and the requirements of these facts and recommendations.

3. Much misinformation is rampant about the problems of the aged and some of this is serving as a basis for manifestly political motivations by some members of Congress in the formulation of proposed laws concerning elderly citizens.

4. The matter of providing health care for the aged requires serious, positive, constructive study and the time remaining before July 1 when Congress will probably adjourn does not allow for this. As was stated in the press release of the Health Insurance Association of America:

"The sharply different lines of approach taken by various legislative proposals in attempting to determine what, if any, should be the extent of federal responsibility in this field emphasizes that the whole subject of providing health care protection for the aged requires broader and deeper study that it has thus far been given.

"There have been public hearings on only one of the numerous plans which have been introduced for Congressional consideration. This proposal was rejected overwhelmingly by the House Ways and Means Committee. As regards all the other plans before Congress, neither the facts nor public opinion have been adequately explored."

5. Why should Congress approve in haste a measure, whatever be its final provisions, hastily drawn during the closing weeks of a session in a hectic election year which would involve a profound and complex change in the relationship between the citizens, their government and the providers of their medical care.

6. Experience in other countries generally shows that when governmental hospital care is provided, many persons endeavor to secure this care, regardless of their needs; that hospitals are jammed and that there are long waiting lists. This raises a serious question as to the adequacy of our own nationwide hospital facilities to take on any additional case load of this type, and what program would be used to give admission preferences. Would it be required that hospitals take care of the aged beneficiaries of social security insurance before other people? If so, what of the workers who pay social security taxes but are not eligible for benefits. Would they have to wait for hospital care possibly being unable to do any work in the interim? Questions like these become practical ones if careful consideration is given to the effect of this type of legislation. Certainly, they cannot be resolved in a short period of a month or less.

7. I have yet to hear or to read in the newspapers of anyone who has needed medical care that has not been given it. The Los Angeles County Medical Association regularly advertises in local newspapers that free medical care is available to anyone who (A) needs it, and (B) phones in to numbers listed in the ad. The most recent ads ran within the last month. Not one person has telephoned.

8. Another situation which could well invite delay is that the A.M.A. has just constituted a Commission on Costs of Medical Care to make

an exhaustive study of that subject, with an initial grant of $100,000 to finance its work.

So that the position of the insurance industry may not be misunderstood, I read the following from its "A Statement of Policy" adopted May 3, 1959:

"That segment of our older population unable to finance the costs of health care for themselves because of their limited means should have assurance that health care is available to them when they need it. To that end, the health insurance business supports assistance programs to supplement the efforts of voluntary agencies. As a service to the community the health insurance business stands ready to make its knowledge and facilities available to assist in the administration of such programs.

"The health insurance business supports a federal matching funds program which would encourage development of nursing home facilities, of suitable standards, for older persons who need medical attention of less scope than full hospital care."

With industry, let's stay in the ring, giving our time, thoughts and efforts to seeing that the private enterprise system is continued, the soundness of the American dollar maintained, that the battle with inflation is won and that the close relationship between the doctor and his patient is preserved as a personal, confidential and exclusive one and that the present system of providing and financing of medical care is allowed to continue without governmental interference —a system which has given our country the highest standards of medical care in the world.

Let's work together.
All have a share in the beauty
All have a part in the plan.
What does it matter what duty
Falls to the lot of man?
Someone has blended the plaster,
And someone has carried the stone;
Neither the man nor the master
Ever has builded alone.
Making a roof from the weather
Or building a house for the King,
Only by working together
Have men accomplished a thing.

I appreciate the opportunity you have presented to me to visit with you and to present these thoughts.

ANTICOAGULANT THERAPY

(Continued from page 1251)

outlined we have not had a single case of clinically significant hemorrhage with a prothrombin time under 50 seconds.

CONCLUSIONS

This presentation reaffirms the need of national clinical standardization of the technic of prothrombin time determinations as offering a most important challenge today. Such standardization would permit the administration of long-term anticoagulant therapy to the tens of thousands of patients who need and deserve it. It would give the opportunity of easier control when patients move from one geographical area to another and blood plasma samples are being processed by different laboratories. It presumes a cooperative effort and understanding between various laboratories. It suggests the need for an added new therapeutic standard in the range of approximately 32 seconds. It urges the selection of a thromboplastin that is easily controlled. The criteria for the selection of a commercially available thromboplastin preparation in the utilization of the one-stage technic is presented. Finally, points in technic are listed to make precise the performance of the one-stage test so as to afford comparative effort between laboratories. By way of emphasis I reiterate the words of Jeffers[15] that, "Oral anticoagulant therapy is only as good as its laboratory control."

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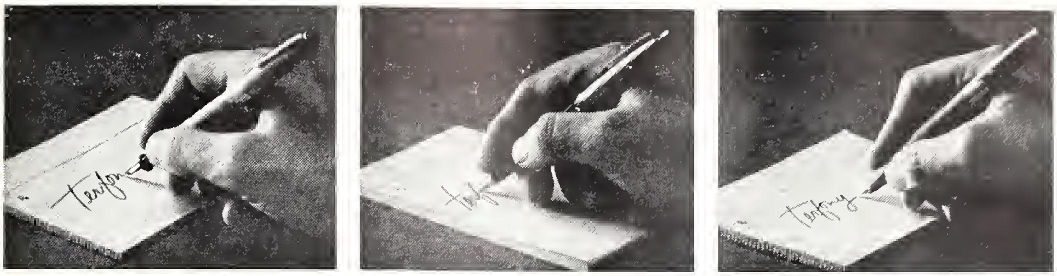

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R. O. Muether, M.D.

President's Message

As Dr. Murphy suggests in this month's editorial pertaining to "Missouri AMEF Month," any substantial increase in federal grants to our nation's medical schools may prove to be a Trojan horse, by which government influence is imperceptibly, but inevitably, extended over the private practice of medicine.

Yet unless private donors step forward in greater numbers, additional federal aid may be the only alternative the schools have.

Today, a medical student's tuition usually covers only about 18 per cent of the cost of his education. The school must absorb the remaining 82 per cent. Small wonder, then, that the combined deficit of all medical schools exceeds $10 million each year.

Is there another solution to the problem? Should students be forced to pay substantially higher tuition fees, for example?

You and I know it just would not work; that a medical education is already costly and a severe drain on the finances of many students and their families. Further to limit the enrollment of highly-qualified young men and women at a time when we need more physicians would be senseless.

Other desperation solutions to the school's financial problems appear to be similarly unrealistic. So it comes back to the question of whether physicians themselves —along with philanthropists and the business community—will be willing to shoulder the responsibility for underwriting medical education. Or will Washington be asked to do it?

During the "Missouri AMEF Month" campaign, you and I will have to decide this question in our own minds. I strongly urge you to support the private endowment principle by sending a contribution to your alma mater or to contribute to your State Association's AMEF campaign.

R. O. Muether M.D.

EDITORIAL

A.M.E.F.

Burdened with an annual operating deficit of $10 million, American medical school administrators are faced more and more with the prospect of being forced to trade red ink for red tape.

Unless private grants to the schools—including gifts from practicing physicians—increase in size and volume, the voices of those who call for direct federal subsidy to the nation's 85 medical schools will influence an ever greater audience. As a consequence, school administrators may find their financial problems decreased by federal largesse, but their educational problems compounded by federal controls.

Few engaged in the private practice of medicine—or our colleagues at the universities—believe that federal aid is the solution to the financial problems of our medical schools.

He who pays the piper calls the tune—and if distant, politically-motivated federal agencies are allowed to enter the area of medical education, who is to say how this will affect the quality and dedication of tomorrow's physicians—and their attitudes toward political medicine?

Fortunately, in the American Medical Education Foundation we have an effective weapon for combatting this threat. Every dollar we contribute through AMEF goes directly to our medical schools, since all overhead expenses are borne by the A.M.A. and the state medical associations. By giving financial support to AMEF we, as physicians, can help sustain the independence of our medical education system in this country.

Your contribution to AMEF does more than this, however. It affords tangible proof to philanthropic businessmen and foundations—whose support is also needed—that physicians themselves are joining in the drive to sustain our medical schools and provide better medical service to the people.

Gifts to medical schools from physicians and various medical groups—notably, our Woman's Auxiliaries—through AMEF last year amounted to $1,198,287. Added to this was an estimated $3 million which doctors sent directly to the schools.

Together, physicians and private donors (through AMEF and the National Foundation for Medical Education, plus direct contributions) subscribed a record $7.4 million to American schools last year.

Yet, even with this record contribution, our medical schools were still $10 million short of meeting their operating expenses.

Perhaps you are wondering how Missouri's three medical schools fared with respect to grants received in 1960 from AMEF and the National Foundation for Medical Education. Taken together, the schools received grants totaling $141,516.

But here is an interesting fact to consider: Through AMEF alone, Missouri medical schools have received this year almost $35,000, although the total amount raised here in Missouri during last year's AMEF campaign was only $11,334—which includes physicians' gifts amounting to $8,841, plus $2,493 raised by our Woman's Auxiliary.

Equally disproportionate is this fact: During the 1959 AMEF campaign in our state, only 308 physicians out of a total physician population of almost 4,000 gave their financial support. This would seem to indicate that our support of AMEF—one of our strongest weapons in fighting socialized medicine—has been somewhat short of spectacular.

During the month of October—"Missouri AMEF Month"—we will have an opportunity to improve on this record. Soon you should receive by mail a brochure which explains in detail what AMEF is doing and why your help is needed. I urge you to take a few moments to scan this brochure and then give your generous support to the Foundation.

The amount you give is not nearly so important as the fact that you do give something. *Participation on the part of all of us* is the key to success in support of medical education.

James P. Murphy, M.D.
Chairman, Committee for AMEF

Ramblings of the Field Secretary

Approximately 100 interested people attended a one day "Athletic Injury Conference" held at the St. Louis Medical Society Auditorium, Sunday, August 28. This interesting affair was sponsored by St. Louis Medical Society in cooperation with the St. Louis Public High Schools, St. Louis Lutheran High Schools, St. Louis Archdiocesan High Schools, Central States Officials Association, Missouri High School Activities Association, and the public and private schools of St. Louis County.

A panel of physicians, athletic trainers, coaches and athletic officials presented the program.

The main purpose of the conference was to emphasize the protective procedures which should be followed by the schools to the end that every athlete should have the best possible protection for sports participation. Those receiving information and invitations to the conference included coaches, athletic directors, faculty managers, school administrators, physical education and health education teachers, game officials and physicians.

Mr. Dan Devine, head coach of the University of Missouri football team, spoke at the luncheon.

The program was under the direction of the St. Louis Medical Society Sports and Program Committee with Dr. Delevan Calkins, Chairman. Program speakers included the following: William D. Paul, M.D., University of Iowa Medical School; Mr. Jack Rockwell, Trainer of St. Louis Football Cardinals; Marshall Conrad, M.D., orthopedic surgeon, St. Louis; Clinton W. Lane, M.D., dermatologist, St. Louis; Frank Nash, M.D., neurosurgeon, St. Louis; Mr. Charles Burgess, St. Louis, game official.

In addition to formal talks from these participants, a panel discussion with questions from the audience was held with Dr. William Paul, Moderator, and the other speakers serving as members of the panel.

A buffet luncheon was served at noon.

A picture of the panel appears herein identified as follows reading from left to right: Mr. Tom O'Connell, Head Coach, John Burroughs School; Mr. Burgess, Dr. Conrad, Dr. Paul, Dr. Lane, Mr. Jack Rockwell, and Dr. Nash.

A bountiful buffet luncheon was served to all present and this was spiced by an interesting talk, as luncheon speaker, by Dan Devine, Head Coach of the University of Missouri football team. Those seated at the head table with Mr. Devine depicted in the accompanying picture are: Dr. Lane, Dr. Conrad, Dr. Paul Max, President, St. Louis Medical Society; Mr. Devine, Dr. Calkins and and Dr. Paul.

The highlights of the afternoon program were the demonstration sessions on "Taping and Training Room Tips." Mr. Fred Wappel, Missouri

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Peacefully asleep . . . she rests, undisturbed by nervousness or tension. (Samples and literature on Meprospan available from Wallace Laboratories, Cranbury, N. J.)

University trainer, is pictured giving tips on ankle taping. Other important demonstrations were given by Mr. Bruce Melin, Washington University trainer, Mr. Chuck Farrington, Rawlings Sporting Goods Company, and Mr. Edmund F. Hanley of the Hanley Medical Equipment Company of St. Louis.

The day's program began at 9:15 a.m. and adjourned at 4:00 p.m. From the many complimentary remarks overheard by your observer during the day's session, from those in attendance, it is reasonable to state that athletic injury conferences of this nature seem to be most welcome and helpful to those directly concerned in one way or another with the problem of sports injuries.

Demonstrations on taping and training room tips were presented in the afternoon session.

A similar conference on a smaller scale, but with the same purpose, was held in Nevada, Missouri, under the auspices of the West Central Missouri Medical Society, on Thursday evening, September 8. Additional details concerning this affair appear elsewhere in this issue under Councilor District News.

NEW MEMBERS

Charles R. Cash, M.D., Kennett, has become a member of the Dunklin County Medical Society. Dr. Cash is a native of Illinois, received his preliminary education in Tennessee, and his M.D. degree from the University of Tennessee in 1959.

Phillip B. Foreman, M.D., 711 Grand Avenue, Hannibal, has become a member of Marion-Ralls Medical Society. Dr. Foreman is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from Washington University in 1955. He served a residency at Jewish Hospital.

Harold W. Keairnes, M.D., 10901 Winner Rd., Independence, has become a member of the Jackson County Medical Society. Dr. Keairnes is a native of Minnesota, received his preliminary education in Minnesota, and his M.D. degree from the University of Minnesota School of Medicine in 1957.

Walter Latimer, M.D., 711 Grand Avenue, Hannibal, has become a member of Marion-Ralls Medical Society. Dr. Latimer is a native of Puerto Rico, received his preliminary education in Puerto Rico, and his M.D. degree from the University of Madrid, Madrid, Spain, in 1959.

Otto M. Spurny, M.D., 409 East 63rd Street, Kansas City, has become a member of the Jackson County Medical Society. Dr. Spurny is a native of Vienna, Austria, received his preliminary education in Austria, and his M.D. degree from the University of Arkansas in 1956.

Charles W. Stelle, M.D., 107 W. Linwood Blvd., Kansas City, has become a member of the Jackson County Medical Society. Dr. Stelle is a native of Kansas, received his preliminary education in Kansas, and his M.D. degree at the University of Kansas Medical School in 1927.

Joseph W. Stein, M.D., 1416 Professional Bldg., Kansas City, has become a member of the Jackson County Medical Society. Dr. Stein is a native of Tennessee, received his preliminary education in Michigan, and his M.D. degree from the University of Tennessee in 1934.

DEATHS

Taylor, Byron H., Jr., M.D., Flat River, a graduate of the University of Tennessee, 1945; member of the Mineral Area Medical Society; aged 39; died July 30.

Holliday, Morgan Lee, M.D., Fillmore, a graduate of Kansas City College of Medicine and Surgery, 1921; member of Andrew County Medical Society; aged 69; died August 8.

Patterson, William Riley, M.D., Warrensburg, a graduate of Beaumont Hospital Medical College, 1891; member of Johnson County Medical Society; aged 95; died August 19.

Hewitt, Walter R., M.D., St. Louis, a graduate of Washington University, 1908; member of St. Louis Medical Society; aged 75; died August 22.

Burns, Stanley S., M.D., St. Louis, a graduate of Washington University, 1910; member of St. Louis Medical Society; aged 71; died August 22.

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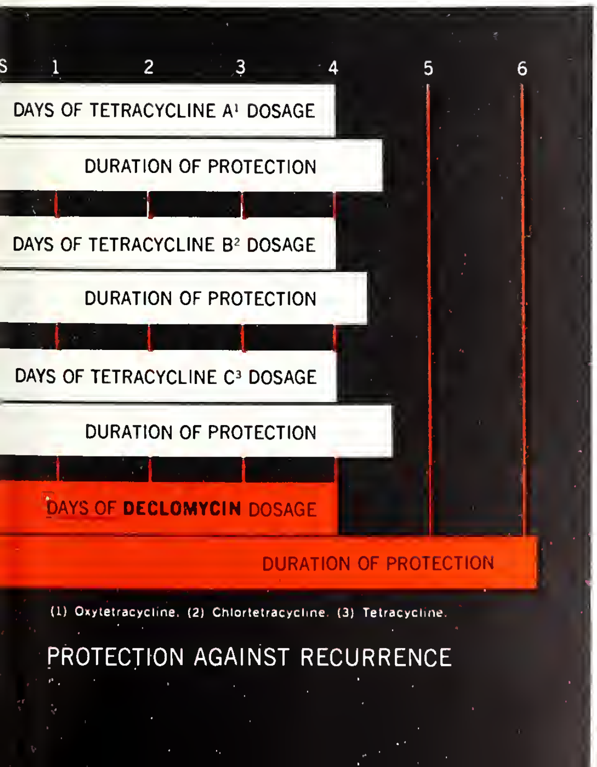

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News—Personal and Professional

The medical staff of the Phelps County Memorial Hospital recently installed **M. K. Underwood,** M.D., Rolla, as chief of staff. **J. D. Butts,** M.D., Rolla, was elected assistant chief of staff.

The Heart of America Tuberculosis and Health Association has been awarded a $6,000 grant by the National Tuberculosis Association for a study to evaluate the tuberculin test as a case-finding tool among school children of various ages. The grant is under the direction of **Florence E. MacInnis,** M.D., Kansas City.

The St. Louis chapter of the National Multiple Sclerosis Society recently named **James L. O'-Leary,** M.D., St. Louis, as chairman of the medical advisory board. Other members of the board are Drs. **Eli Robins, Sol Sherry, Herbert E. Rosenbaum, Louis L. Tureen** and **Irwin Levy.**

Among guest lecturers at the third annual Hospital Administrators Development Program held at Cornell University in July was **David Littauer,** M.D., St. Louis. He discussed "Developments in Medical Staff Organization."

As president of the Laclede County Tuberculosis Society, **J. H. Summers,** M.D., Lebanon, presented a nursing scholarship which is given each year by the Society.

Four hospital and health agencies received checks totalling $18,000 from the St. Louis Heart Association, proceeds from the Heart Sunday collections. **John J. Hammond,** M.D., St. Louis, president of the St. Louis Heart Association made the presentations.

Appearing before the Public Relations Conference of the American Medical Association the first of September, to explain the plan of the St. Louis County Medical Society for improving availability of medical care to all persons more than 65, were **Joseph B. Kendis,** M.D., St. Louis, president of the Society, and Edgar Mothershead, executive secretary.

Speaker at an August meeting of the Fulton Kiwanis Club was **Alfred K. Baur,** M.D., Fulton. His subject was "Mental Health."

Representing professional members of the 19th district of the Missouri Division of the American Cancer Society at a meeting in Dexter was **Robert S. Smith,** M.D., Portageville.

The Radiological Society of Greater Kansas City has elected **Gerhard W. Schottman,** M.D., Kansas City, as its president, and **J. Stewart Whitmore,** M.D., Kansas City, as secretary-treasurer.

AMEF's new award, the "Citation," given to counties in which 100 per cent of the membership have contributed and to continuous generous contributors through the years, will be presented **Frank B. Leitz,** M.D., Kansas City, and **J. W. Thompson,** M.D., St. Louis.

CANCER CONFERENCE

The Southeast Missouri Cancer Conference will be held at the Colonial Tavern Restaurant, Cape Girardeau, on Sunday, October 2.

Guest speakers and their subjects follow:

Dr. Phil C. Schreir, Professor of Obstetrics and Gynecology, University of Tennessee, "Evaluation of Papanicolan Smear as Office Procedure."

Dr. Carl V. Moore, Professor of Medicine, Washington University, St. Louis, "Leukemias."

Dr. Terry E. Lilly, Jr., Kansas City, "Early Diagnosis of Lump in Breast."

Dr. Jose H. Sala, radiation therapist, Ellis Fischel State Cancer Hospital, "Skin Malignancy —Diagnosis and Treatment."

The conference will begin at 1:30 p.m. and run through the afternoon and early evening. Registration will begin at 12:30 noon. The program will include a hospitality hour and dinner.

This will be the seventh annual conference at Cape Girardeau. Each year it has been attended by physicians from Southern Illinois, Western Kentucky, Northern Arkansas, Northwestern Tennessee and Southeastern Missouri. It is sponsored by the American Cancer Society, the Missouri State Medical Association, the American Academy of General Practice, and the Cape Girardeau County Medical Society.

in infectious disease[17,22,30,36]
in arthritis[18,19,20,29]
in hepatic disease[2,3,4,5,38]
in malabsorption syndrome[1,2,6,27]
in degenerative disease[6,7,19,20,40]
in cardiac disease[23,28,29,38,41]
in dermatitis[24,39]
in peptic ulcer[8,21,38]
in neuroses & psychiatric disorders[25,28]
in diabetes mellitus[31,32,33,38]
in alcoholism[9,11,35,37,38]
in ulcerative colitis[10,14,16]
in osteoporosis[13,19,20]
in pancreatitis[15]
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Councilor District News

FOURTH COUNCILOR DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Jefferson County Medical Society

A meeting of the Jefferson County Medical Society was called at 8:00 p.m. on July 26, 1960, at the Jefferson Memorial Hospital with the following doctors present: Drs. T. A. Donnell, H. E. Donnell, H. Yoskit, C. Rice, J. F. Rutledge, B. Bolgar, C. E. Fallet, E. H. Allbee and F. L. Kozal.

Since there were no problems brought up for discussion in the regular business meeting, the formal program was immediately given.

Dr. A. W. Stickle discussed "Eye Emergencies and Diseases in General Practice," and presented an informative and interesting discussion in an informal manner, demonstrating various technics for diagnosis and treatment of eye diseases and injuries. In his discussion he suggested a set of instruments, medications and diagnostic and useful aids which every physician doing general practice should have in his office.

As usual, our meeting closed with delicious refreshments served by the members of the kitchen staff at the hospital.

F. L. KOZAL, M.D., *Secretary*

FIFTH COUNCILOR DISTRICT

BYRON M. STUART, BOONVILLE, COUNCILOR

Howard County Medical Society

The Howard County Medical Society held a called meeting at the Commercial Trust Company on August 11, 1960, at 7:30 p.m. All members of the Howard County Medical Society were present at the meeting which was conducted by the President, M. P. Leech, M.D.

The meeting was attended by the Board of Trustees of the planned Albert Kellar Memorial Hospital and the architect, Mr. Bruce Barnes. Plans were studied, changes and additions recommended and needed alterations discussed and suggested. Plans for the recently added chapel were well received.

The meeting adjourned at 10:00 p.m. The next meeting will be at the call of the president.

WM. J. SHAW, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

West Central Missouri Medical Society

An interesting and profitable evening, we are sure, was spent by a good number of physicians and high school football coaches of the West Central Missouri area at the Nevada Country Club on Thursday evening, September 8. This gala occasion was centered around the program on "Athletic Injuries" which was jointly sponsored by the University of Missouri Medical School and the Missouri Academy of General Practice.

The evening festivities began with a social hour which furnished a fine opportunity for coaches and doctors to rub shoulders, get acquainted, and informally discuss mutual problems of sports injuries.

Following the social hour dinner was served and then the program as follows presented: "The Long Bones," J. Otto Lottes, M.D., St. Louis, Assistant Professor of Clinical Orthopedic Surgery, Washington University Medical School and Orthopedic Consultant at City Hospital; "Hematuria and Knee Injuries," Glenn McElroy, M.D., Orthopedic Consultant, Student Health Hospital, University of Missouri, Columbia; "The Trainer's Responsibilities," Fred Wappel, Athletic Department, University of Missouri; "The Coach's Responsibilities," Harry Smith, Assistant Football Coach, University of Missouri.

Following the formal presentations, a question and answer period proved fruitful with additional interesting discussion on certain specific injuries brought up by coaches in the audience. The members of the West Central Missouri Medical Society were quite pleased with this particular program and with the fine representation of football coaches from the area.

It is felt that this was a valuable session for both coaches and doctors and it is hoped that this is the beginning of an annual meeting of this kind under the sponsorship of our society. The coaches present were all guests of the West Central Missouri Medical Society. Special thanks are given to the Nevada doctors and particularly to Dr. Roy Pearse who served as local chairman for the meeting and handled most of the details.

Appreciation is also extended to Kenneth Keown, M.D., Columbia, Chairman of the Post-

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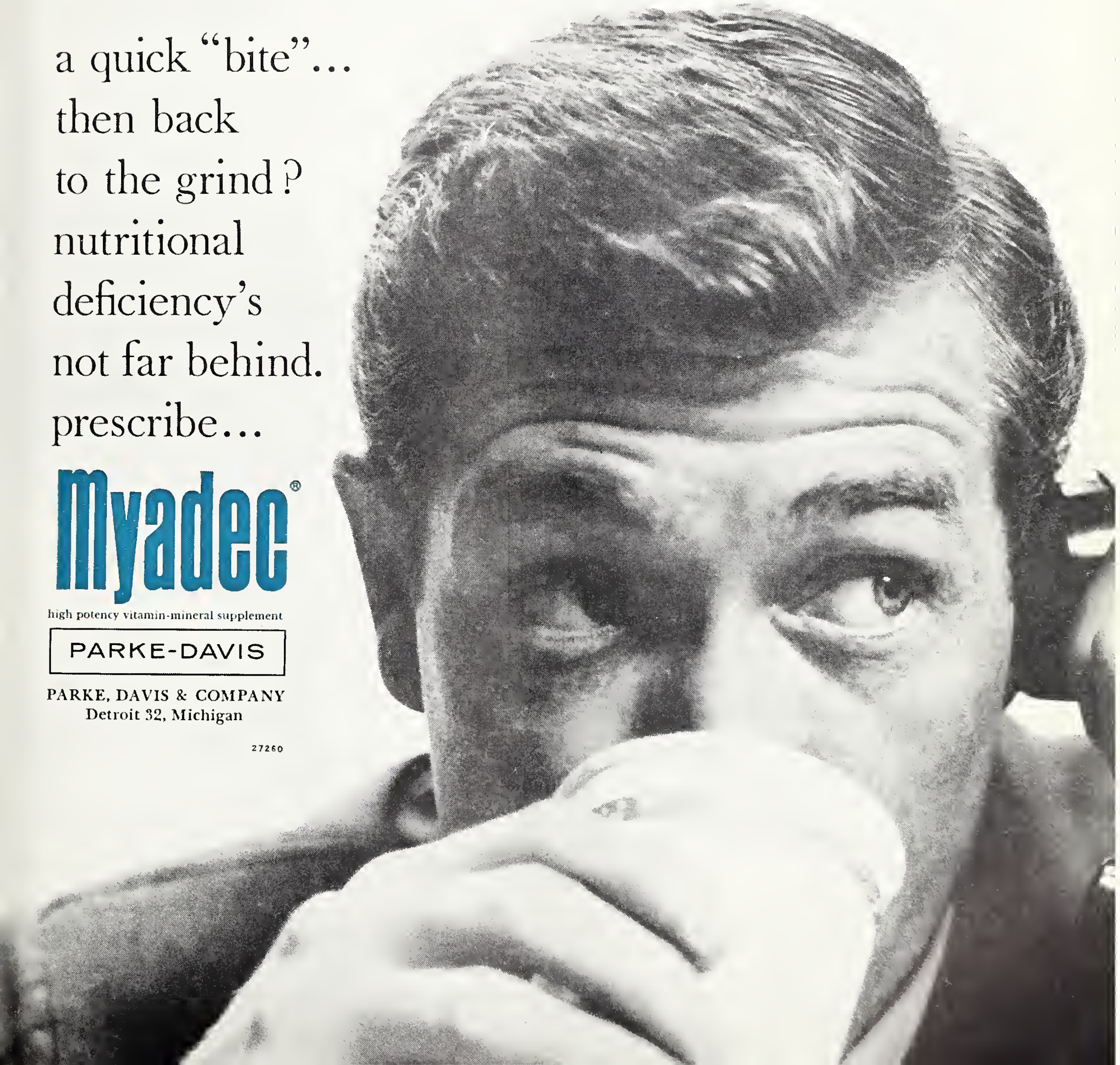


graduate Committee of the University of Missouri Medical School, for his part in lining up such a valuable program. Last, but not least, our thanks also go to the postgraduate committee of the Missouri Academy of General Practice, Doyle McCraw, M.D., Bolivar, Chairman, for assistance in the development of this program.

Carter Luter, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

E. A. STRICKER, ST. JAMES, COUNCILOR

Mid-Missouri County Medical Society

On Thursday evening, July 28, the Mid-Missouri Medical Society and the doctors' wives held a dinner meeting at the Wayside Inn in Steelville.

The evening festivities began with dinner at 6:30, followed by an interesting and informative scientific program given by M. Pinson Neal, M.D., Columbia. Dr. Neal presented a CPC with the able assistance of John Modlin, M.D., Columbia. Members of the society are always glad to have Dr. Neal on our programs and we are grateful to him and Dr. Modlin for this particularly well presented informative CPC.

The counties composing our local society were all well represented at the meeting in Steelville.

M. K. Underwood, M.D., *Secretary*

U. S. NATIONAL HEALTH SURVEY EXAMINATIONS IN BATES COUNTY, MISSOURI

A series of health examinations which are part of the Public Health Service's U. S. National Health Survey will be given in Bates County, Missouri, during a two and a half week period beginning October 19.

The approximately 150 examinees will not be volunteers, but adults predesignated by a probability sampling technic.

The examinations will be performed in a single visit to a mobile examination center which will be brought to the area. The purpose of the examinations is to collect, on a uniform basis, statistical information on certain chronic conditions, particularly cardiovascular diseases and arthritis, and on physical and physiological measurements.

The health examination consists of a medical history; a physical examination for certain conditions for which examination can be made in a uniform way and in a single visit, and for which diagnostic criteria exist; a dental examination; screening tests for visual acuity and hearing; a 12-lead electrocardiogram; blood pressure determinations; 6 foot-14 by 17 chest x-ray; x-rays of hands and feet; modified glucose tolerance test, microhematocrit determination; serologic test for syphilis; serum cholesterol level; serum bentonite flocculation test for rheumatoid arthritis; urine sugar (and albumin for males); height and weight; and a series of body measurements which are important—from the standpoint of safety and efficiency—in the design of motor vehicles; aircraft, and farm and industrial machinery.

Findings are not disclosed to examinees directly. Each individual is asked, however, if he wishes the findings supplied to his own dentist and physician, and if the examinee so authorizes, a report is sent to the physician and dentist he designates.

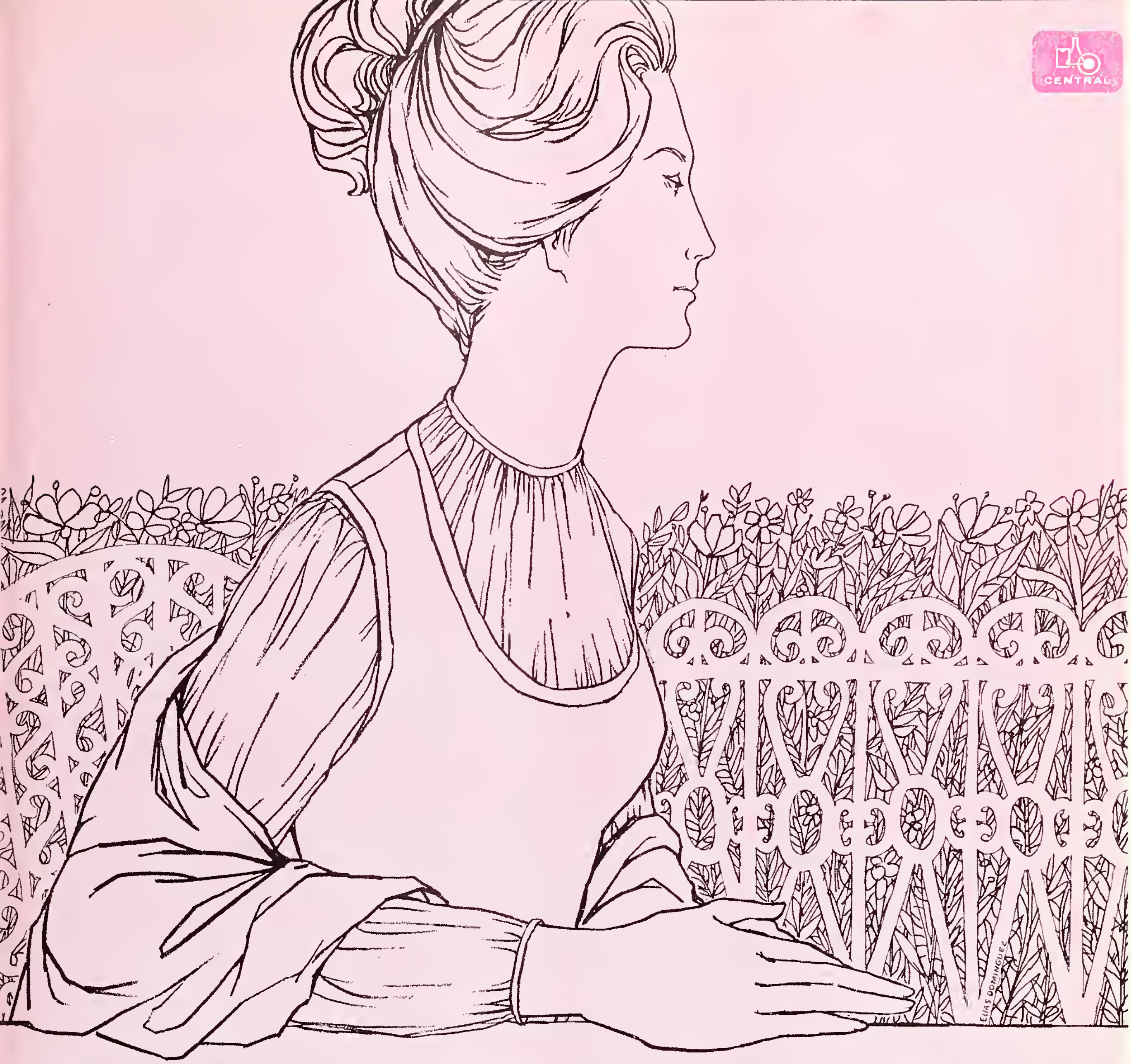
The health examination is not intended as a screening procedure; referral for diagnosis is not made. The fact that the examination is not complete and is not a substitute for a visit to one's own physician and dentist is stressed with each examinee.

The examining physicians will be fellows or senior residents in internal medicine working temporarily with the Public Health Service. The other team members are nurses, a dentist, x-ray technicians, and history interviewer-receptionists regularly on the PHS staff.

The Health Examination Survey is nationwide and is a major project of the U. S. National Health Survey authorized by Congress in 1956. It constitutes the first attempt in this or any other country to perform examinations on a representative sample of the national population.

The Bates County examination program will be the sixth of a series of such "stands" in the national sample localities. The data gathered in a particular locality represent that area in the nationwide probability sample but do not produce estimates of conditions in the specific locality. When all the stands are completed, the results will yield estimates for the United States as a whole.

Another part of the National Health Survey program—a Health Interview Survey which has been going on since July 1957—has already produced reports on topics which can be investigated appropriately by this technic. Among the topics published so far are physician visits, dental care, disability, persons injured, acute illnesses, hospitalization, impairments, and broad groupings of chronic conditions.



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The Missouri Division of Health

The Nursing Home Problem in Missouri

Nursing homes have been increasing in number in this state proportionately to the increase in population of older citizens. In 1942 there were 67 licensed nursing homes. In 1950 the number had increased to 160 licensed nursing homes and in 1956 there were 367 licensed nursing homes. The Division of Health was charged with the licensing of nursing homes in 1941, and did its best to discharge its obligation. In 1955 public opinion had been stirred to a point that a new nursing home law was passed. Because of legal technicalities, this new law was found to be unconstitutional. For this reason, the original 1941 law continued on the books. At the time of the Warrenton fire, several corrected versions of the nursing home licensing law were being considered by appropriate committees. After the disastrous fire, public opinion was aroused to such an extent that the Legislature passed, with hardly a dissenting vote, the current nursing home licensing law.

As of May, 1957, the Division of Health had listed 603 nursing homes. Of this number, 326 were licensed under the old law. The Division of Health survey indicated that not a single nursing home met the requirements of the new law and the regulations and codes in their entirety.

With the enactment of the new nursing home law, the Division of Health selected six sanitarians to act as inspectors. These sanitarians with the cooperation of the University of Missouri were given special training in fire safety. They were then sent into the field to evaluate the fire hazards in the existing nursing homes. Along with the training of sanitarians, the Division of Health launched an aggressive recruitment campaign for institutional advisory nurses. The Division of Health was able to recruit, within a few months, eleven registered nurses who had recent experience and training in hospital nursing technics and patient care.

It was recognized that many nursing home operators were relatively untrained for the career they had selected. It was evident that a great deal of help on the part of state personnel was necessary if the nursing homes were to comply with the new requirements of the law. It was for this reason primarily that the institutional advisory nurses were recruited.

The Division of Health recognized that the nursing home field was relatively new with limited experts in this field, and that a great deal of thoughtful help in drafting regulations and codes was necessary to implement the new nursing home licensing law. The Division of Health called upon hospital administrators, nursing home operators, representatives of the medical and osteopathic professions, and representatives of the nursing and practical nursing professions to consult in drafting the regulations for nursing homes. There was little time for the law needed immediate enforcement. The Division of Health felt that the regulations and codes as written are most adequate, although in some cases it was found difficult to convince operators that certain accepted nursing procedures are necessary for good patient care. By the time the codes were printed and approved and trained nurses were recruited, the trained sanitarians in the field had completed the first survey of existing nursing homes. The results of that survey are portrayed in the graph. There was no area of compliance.

Personnel of the Division of Health ran into some miserable situations. Many cases were found of older people living under unbelievable conditions. The graph shows a dramatic change in the fire safety items in relation to the percentage of noncompliance items found in nursing homes at the present time. During the last two and one half years, conditions in nursing homes have improved considerably and residents of these homes, with few exceptions, now have sheets on their beds and are receiving three meals a day, with nursing care under the direction of either a professional or practical nurse.

As of now the results of the supervision and the willing cooperation of nursing home operators are becoming increasingly apparent. There are now 281 nursing homes licensed, indicating that this number is in full compliance with the regulations and codes. There are 450 nursing homes which have complied with one or more of the present regulations, and it should be pointed out that there are four major areas with

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Kestler, O.: Conservative Management of "Low Back Syndrome", J.A.M.A. 172: 2039 (April 30) 1960.

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which the nursing homes are required to comply: adequate nutrition, minimum acceptable care, minimum acceptable sanitation, and compliance with the fire safety regulations.

It is not unusual for Division of Health personnel to make five instructional visits to a home for each inspectional visit they make. It is recognized that the nursing home compliance is a two-way street. Help and instruction must be given for continued cooperation from the nursing home operators. There were 346 nursing homes so operated, so situated, and so constructed that it became obvious that it was impossible for them to comply with the law. The closing of these nursing homes affected 1,500 nursing home residents. Most of the homes continued to care for two residents, which is acceptable under the present law. Compliance with the law is required when a nursing home has three or more patients. Nine hundred residents were moved to other nursing homes or homes of relatives and friends. The remaining are probably being maintained in boarding homes and have not been accounted for in the recent survey.

There are now approximately 450 operating nursing homes in Missouri which will be in full compliance with the licensing law in the near future. In other words, the Division of Health expects to license approximately 450 out of the original 600 to 700 nursing homes. Applications have been received for approval to construct additions to existing homes or new structures totaling more than 2,000 beds since the licensing law was passed in 1957. Many counties are seriously considering building nursing homes and three counties have built new modern homes which are leased to nonprofit associations for operation.

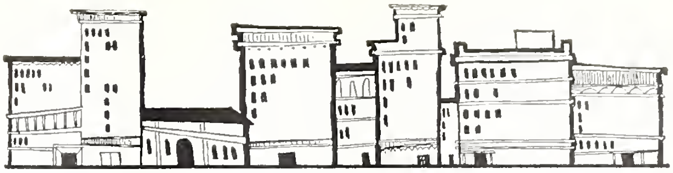
It is difficult to forsee what the eventual developments will be in the field of institutional care for the aged. There is a real need for well-run, well-operated modern nursing homes. There is a real need for supplementary legislation aimed at closing the loopholes in the present law, especially the nursing home that claims to be a boarding home and does not give care other than food, shelter and laundry to the elderly residents. It is most apparent that more interest is being taken in the old age problem in Missouri. A good deal of this interest was stimulated by the fire at Warrenton, the new nursing home licensing law enacted by the Legislature, and the cooperative efforts between the public and the Division of Health in executing the law.

During the past three years there has been a marked and steady improvement in the quality of care rendered in licensed nursing homes in Missouri. In sharp contrast to the quality of care rendered patients in these homes is the development of unlicensed and unsupervised boarding houses for elderly people have come into being in Missouri in order to avoid the requirements for fire safety, sanitation and good nutrition. The most expensive of these requirements relates to fire safety. Were it possible for Missouri to enact a fire safety law for public buildings, not only the elderly people in the state but all people would be protected to a great degree from the possibility of death by fire.

Again in sharp contrast to the approximately 15,000 citizens in Missouri who now reside in licensed nursing homes is the large group of persons over the age of 65 on whom there are no reliable statistics. Only approximately 120,000 older people receive old age assistance. In many cases the amount that they receive under the old age assistance program may be inadequate in relation to present day living expenses. It may be assumed that a certain percentage of the 460,000 people in Missouri who are over the age of 65 are not truly self-supporting. Only 8,500 welfare recipients now reside in licensed nursing homes. Of these, 6,500 are over the age of 65. Two thousand of these receive permanent and total disability grants.

A very real start has been made toward improving the health and welfare of Missouri's senior citizens. This start is represented by the passage and enforcement of the nursing home licensing law. Further considerations should be given to senior citizens.

From the Medical Schools



ST. LOUIS UNIVERSITY

Trip Abroad

Dr. Alrick B. Hertzman, director of the department of physiology at the St. Louis University School of Medicine, was invited to deliver the principal research paper before the Second International Bioclimatological Congress in London, England, on September 7. The Congress was scheduled to meet from September 4 to 10 at the Royal Society of Medicine.

Dr. Hertzman's research paper entitled "Cutaneous Vascular and Cardiac Responses to Heat" was scheduled to be delivered before a three hour general session on "Tropical Bioclimatology." Discussants of his research paper will include physiologists from Scotland, Nigeria, Dakar, Africa; Liverpool and the Royal Air Force, Great Britain.

Following the Congress, Dr. Hertzman was invited by Dr. Eric Glaser, professor of physiology at the London Hospital Medical College (University of London), to give a special lecture to the physiologists in the London area. Dr. Hertzman was scheduled to speak on "Circulatory Responses to Heat" on September 12.

Both of Dr. Hertzman's research papers are based on investigations conducted in the physiology laboratories at the School of Medicine under the support of the United States Air Force and United States Public Health Service.

Research underway at the School involves study of the body's responses to heat in a temperature controlled climate chamber. The study involves changes in skin blood flow, sweating, strength of heart beat, changes in the acidity and salt concentration of the blood, skin and body temperature changes and respiratory alterations.

After the Congress, Dr. Hertzman was scheduled to visit the Research Council Laboratories at Hampstead, London; the Royal Air Force Institute of Aviation Medicine at Farnsborough and the Climatic Research Laboratory. Conferences at these three laboratories were to be held on the general subject of the "Physiological Response to Heat." From London, Dr. Hertzman was scheduled to go to Copenhagen to visit Professor Marius Nielsen, a physiologist, and then to Lund, Sweden, to visit Professor Gunnar Bjork of the Cardiological Laboratories.

Appointments

Eight new appointments were made at the School of Medicine effective September 1. New appointees included Dr. Daniel L. Azarnoff, assistant professor in internal medicine, formerly a research fellow in pharmacology at Washington University School of Medicine; Dr. Aaron M. Bernstein, instructor in internal medicine, formerly instructor in internal medicine at Washington University School of Medicine; Dr. Robert L. Kistner, instructor in surgery, who recently returned from military service and completed his residency in surgery at the St. Mary's Group of Hospitals in 1959; Dr. John J. McNamara, instructor in radiology, formerly assistant in radiology at the University; Dr. Daniel I. Mullally, instructor in microbiology, formerly assistant in microbiology at the University; Dr. Audrey L. Stevens, instructor in pharmacology, formerly a National Science Foundation Postdoctoral fellow; Dr. David L. Simon, instructor in pediatrics, formerly assistant in pediatrics at the University, and Dr. Mary Lou Thomasson, instructor in radiology, formerly assistant in radiology at the University.

Summer Research

Stipends totaling $16,100 supported the summer research investigations of 27 St. Louis University medical students from 14 states for a 12 week period, which ended September 1. The student research program is under the direction of Dr. Dermott Smith, assistant dean and chairman of the Committee on Summer Research.

Sources of research funds and amounts granted to the School of Medicine are as follows: Lederle Laboratories Division, $1,200; National Science Foundation, $2,400; Tobacco Industry, $500; United States Public Health Service, $9,000 and St. Louis University Biochemistry Committee on Grants, $3,000.

Seven of the recipients were from the St. Louis area. Recipients of $600 stipends from the University's Biochemistry Committee on Grants were Joseph A. Bardenheir, III, a freshman, son of Mr. and Mrs. J. Bardenheir, 8035 Park Drive, St. Louis; Edwin J. Cunningham, 7341 Maryland Ave., St. Louis, and Jon F. Sassin, a sophomore, son of Dr. and Mrs. E. F. Sassin, 6000 Guilford Place, St. Louis.

Recipients of $600 stipends from the United States Public Health Service were William C. Hummel, a junior, son of Mr. and Mrs. William A. Hummel, 44 Grantwood Lane, St. Louis; John J. Kelly, 5858 Walsh, St. Louis; Aloys M. Rieser, Jr., son of Mr. and Mrs. Aloys Rieser, 1705 Meredith, Lemay and Ronal G. Ross, 3535 Lafayette Ave., St. Louis.

Other stipend winners were Joseph P. Emmite, Dickinson, Texas; Charles Hoppel, Selah, Washington; Arthur S. Ludwig, Detroit, Mich.; Daniel M. Philbin, Milford, Conn.; James Pine, Clifton, Ariz.; Ray Tremblay, Toledo, Ohio; Charles T. Bombeck, III, Kansas City, Mo.; Donald J. Maraist, Port Arthur, Tex.; James F. Clark, Worthington, Minn.; Scott C. Guth, Phoenix, Ariz.; Willard A. Hauser, Cleveland, Ohio; Charles B. Jenney, Salina, Kansas; Michael Steiner, Youngstown, Ohio; Joseph Clancy, Brooklyn, N. Y.; Joseph M. Hughes, Butte, Montana; F. Stanley Seifried, Orrville, Ohio; William A. Simmons, Kirkwood, Ill.; Robert J. Stanley, Maplewood, N. J.; James A. Monteleone, Chicago Heights, Ill., and Joseph Reinkemeyer, Linn, Mo.

The students were selected by the medical faculty on the basis of academic record and aptitude for research investigation. The stipend award winners, who are in their freshman, sophomore and junior years of study, are engaged in preclinical investigations involving the basic science departments within the School of Medicine as well as in the area of clinical experimental.

Their area of study includes investigations involving heart diseases, viruses, experimental and human silicosis, mental health, lipid metabolism, diabetes and many other subjects.

The summer research program will end September 1.

Meetings

Dr. James W. Colbert, Jr., dean; Dr. George E. Thoma, Jr., director, Section of Nuclear Medicine at the School of Medicine, and Dr. William H. Elliott, professor of biochemistry, participated in a symposium on "University Curricula in Radiological Health" in Princeton, N. J., August 2 to 4. The program was sponsored by

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"34 out of 59 sulfonylurea primary failures were successfully treated with DBI."[7]

the United States Public Health Service, Division of Radiological Health.

Dr. Edward A. Doisy, Jr., professor of biochemistry, attended the Nutrition Foundation, Inc., meeting held in Skytop, Pa. He delivered a paper on "Influence of Dietary Components of Bile Acids" before representatives from 53 different industries. The purpose of the meeting was to provide an opportunity for industrialists to study the various facets of research being subsidized by their contributed funds.

Dr. Otakar Machek, instructor in orthopedic surgery, delivered a paper before the International Congress of Physical Medicine and Rehabilitation in Washington, D. C. Dr. Machek's paper was entitled "The Second Year Review of Evaluating and Classifying the Vocational Potentials of the Cerebral Palsied."

UNIVERSITY OF MISSOURI

Leukemia Guild Grant

A grant of $26,000 to the University of Missouri has been received from the Leukemia Guild of Missouri and Illinois in support of research to be used in the continuation of the two-phase research project on leukemia begun last year.

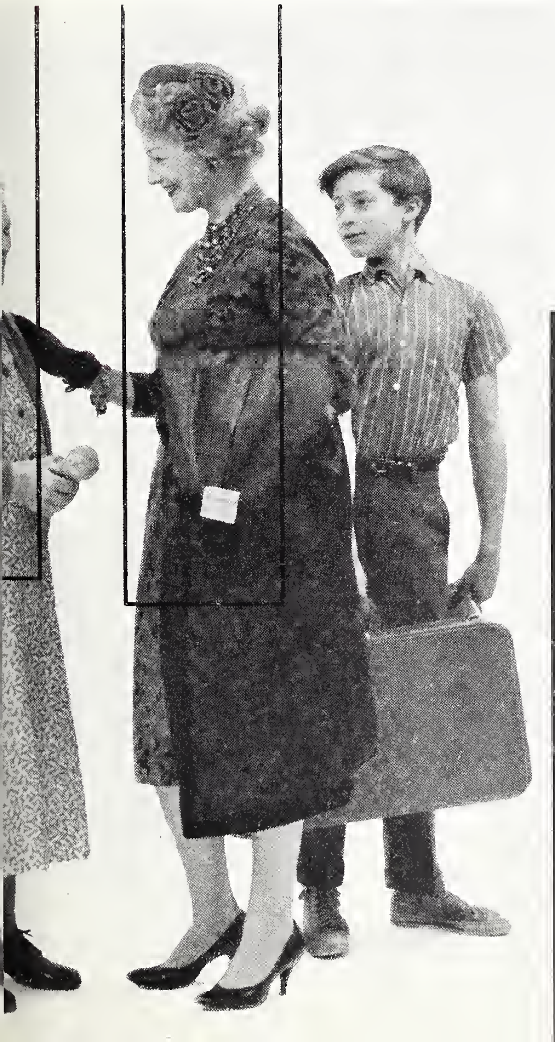
About $10,414 of this year's grant is to be used in the continuation of studies in the department of pathology under the direction of Dr. Fred V. Lucas, professor of pathology, and Dr. Joseph E. Flynn, professor of pathology and chairman of the department.

Dr. Lucas said he and Dr. Flynn will devote much of their investigation to the hemolytic anemia which develops in some cases of leukemia. This anemia is thought to be due to the development of antibodies in the patient causing a breakdown of red corpuscles. They will seek means for easier detection of the antibodies and hope to find ways of neutralizing them if they have developed.

The pathologists will inject laboratory animals, such as rabbits or goats, with blood from leukemia patients in their attempts to determine the best methods of early detection of the antibodies involved in the production of anemia.

The remainder of this year's grant will be used in the continuation of research by Dr. Herbert E. Brown, assistant professor of anatomy, and Dr. John T. Lowney, assistant professor of medicine.

Dr. Brown said he will seek information on the factors producing changes in the shape, size,



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1. Walker, R. S.: Brit. M. J. 2:405, 1959.
2. Odell, W. D., et al.: A.M.A. Arch. Int. Med. 102:520, 1958.
3. Pearlman, W.: Phenformin Symposium, Houston, Feb. 1959.
4. DeLawter, D. E., et al.: J.A.M.A. 171:1786 (Nov. 28) 1959.
5. McKendry, J. B., et al.: Canad. M. A. J. 80:773, 1959.
6. Miller, E. C.: Phenformin Symposium, Houston, Feb. 1959.
7. Krall, L. P.: Applied Therapeutics 2:137, 1960.

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number and function of the white blood cells in cases of leukemia, and the effects of treatment with various agents which could possibly alter the development and progress of the disease process.

Dr. Lowney will continue to investigate the clinical aspects of leukemia, evaluating effects of some of the drugs used in therapy and studying changes effected by various compounds so that physicians may more closely anticipate the needs and effects of certain types of treatment.

As a result of their leukemia research, Dr. Thomas W. Burns, associate professor of medicine, and Dr. Raymond Vickers, and Dr. John T. Lowney, assistant professors of medicine, have co-authored an article entitled "Acute Leukemia After Radio Active Iodine Therapy for Hyperthyroidism," appearing in the July issue of *Archives of Internal Medicine*. The article concerns two cases of acute leukemia and covers clinical aspects of the patients.

Health Agencies Meet

An all-day meeting of the Missouri health agencies, both public and private, was held at the Medical Center August 5, with W. G. Green, executive director of the Missouri Heart Association, Inc., acting as chairman.

The various agencies each outlined their respective programs and discussed how they could be of service in helping indigent transportation, medication and other needs, and were especially interested in learning from the Medical Center special problems with which they could assist. Mr. John Perry, associate director of the University Hospital was interested in learning the criticisms the agencies might have had in dealing with the Medical Center.

Attending from Columbia were Dr. Vernon E. Wilson, Dean and Director of the Medical Center; Mr. Perry; Miss Thelma Dorroh, director of the Medical Social Service at the Medical Center; Drs. Ray, Vickers, and Brooke of the Medical Center; Mr. Eugene Huntsinger of the State Social Security Department; Mrs. Miriam G. Hoag, from the Social Service Department of the Missouri Cancer Society; Mr. Harold Edwards, Executive Director of Missouri United Cerebral Palsy; Miss Virginia Pattison, Regional Medical Social Consultant of the Missouri Crippled Children's Service; and Virginia Southwood and Shirley Collier, Medical Center Social Workers.

Other agency representatives were: Dr. C. W. Meinershagen, Director of Cancer and Heart Disease Control Program; Miss Ida E. Gutschke, Missouri Division Vocational Rehabilitation; Don E. Pratt, executive director of the Missouri Tuberculosis Association, Carl E. Wickman, assistant chief of the Bureau for the Blind Department of Welfare; Miss Anna Cleve, field consultant of the Missouri Society for Crippled Children and Adults, Inc.; Mr. Harry Dawdy, executive director of the American Cancer Society, Missouri Division; and Ralph Shower, executive director of the Leukemia Guild.

The group asked to plan future meetings of the various agencies to be held three or four times annually. Miss Dorroh was appointed as chairman.

Golf Tournament Held

The first annual house staff golf tournament was held at the University Golf Course in Columbia August 21 at an all-day session. Hospital residents and staff physicians participated. Dr. Robert Tompson, assistant instructor in surgery organized the tournament, and Mr. Kallenbach, chief pharmacist at the Medical Center, helped procure the trophies awarded from various drug and insurance companies.

The Department of Surgery was awarded the Team Trophy, the Low Net award went to Dr. William Griffin, assistant instructor in obstetrics and gynecology, and Dr. Clarence Thompson, assistant instructor in surgery won the Low Gross trophy. Runner up trophies were also presented.

More than 30 doctors participated in the tournament. A picnic supper followed the tournament at which the trophies were awarded. Another tournament is planned for next year.

Radiology Receives $6,160 Grant

The Department of Radiology has received a grant from the Board of Directors of the James Picker Foundation, on recommendation of the Committee on Radiology of the National Academy of Sciences—National Research Council in the amount of $6,160 for the period from July 1, 1960, to June 30, 1961. Dr. Gwilym S. Lodwick, professor of radiology and Chairman of the Department will be the principal investigator. Dr. Theodore E. Keats, professor of radiology is the co-investigator.

Ten dogs have been experimentally infested with a controlled number of heart-worms, a parasitic, mosquito-born disease. The heart-worm larvae develops in the tissues of the dogs for about 90 days, at which time they are about one inch in length. They then enter the blood stream to migrate to the right chamber of the heart, where they continue their growth to maturity. At this point the worms are large enough to seriously impair cardiac function, and to produce the disease complex under study.

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Anatomy

Dr. Philip H. Krutzsch, assistant professor of anatomy, University of Pittsburgh, School of Medicine, visited the University of Missouri School of Medicine, Department of Anatomy July 25, 1960.

Dr. Edward W. Lowrance, professor of anatomy, and H. B. Latimer, professor emeritus of anatomy at the University of Kansas, former professor of anatomy in Missouri University, have published a paper entitled "Relative Weights and Lengths of the Bones From 105 Human Skeletons From Asia," in *Anatomical Record*, 137:-119-125.

Pathology

Dr. M. Pinson Neal, professor emeritus of pathology, and Dr. John J. Modlin, clinical associate professor of surgery, attended the Mid-Missouri Medical Society (Phelps-Crawford-Dent-Pulaski-Maries-Laclede Counties) in Steelville, Mo., July 28, 1960. Mr. Orin Lehman, director of JOB (Just One Break Organization) here on a historical research project, was one of the principal visitors at the Clinical Pathological Conference. A clinical protocol was supplied to all the MD members in the six county area before the meeting.

Fellowship

Dr. John Porterfield, second-year resident and assistant instructor, was awarded a National Institute of Health post-doctorate fellowship in ophthalmologic pathology at the Armed Forces Institute of Pathology in Washington, D. C. Dr. Porterfield will be on leave of absence from September 1, 1960, to June 1, 1961.

Pediatrics

Dr. Fikri M. Hanna, assistant professor of pediatrics, visited the Department of Pediatrics at the University of Arkansas in Little Rock, Ark., July 27 and 28. The meeting consisted of lectures on changes of body water and its distribution in the newborn, and co-ordinating the study on the effect of stress of body water distribution in the premature baby with the studies here.

Psychiatry

Dr. James M. A. Weiss, associate professor of psychiatry, and acting chairman of the department, was appointed a member of the State Committee for the Missouri Conference on Mental Health by Governor James T. Blair, Jr., August 5, 1960.

Surgery

Dr. John Beusseler, associate professor of surgery, section of ophthalmology, and acting chairman of the department of surgery, contacted the Chief of Eye Service at St. Louis County Hospital regarding negotiations for possible affiliation and visited the American Foundation for Biological Research in Madison, Wis., with Dr. Garth Russell to see and obtain specifications for custom made equipment for the Lions Club Eye Tissue Bank, from July 19 to July 30. Dr. Russell also visited the Washington Hospital Center in Washington, D. C., and conferred on the laboratory arrangement for the Eye Bank.

Drs. Buesseler and Russell attended a meeting at the Missouri Hotel of Sight Conservation Committee of the Lions Club in Jefferson City, August 7, 1960.

Dr. Ian M. Thompson, associate professor of surgery, section of urology, spoke at a Lions Club meeting in regard to the Urology Department of the University Medical Center, July 28, 1960, in St. Joseph, Missouri.

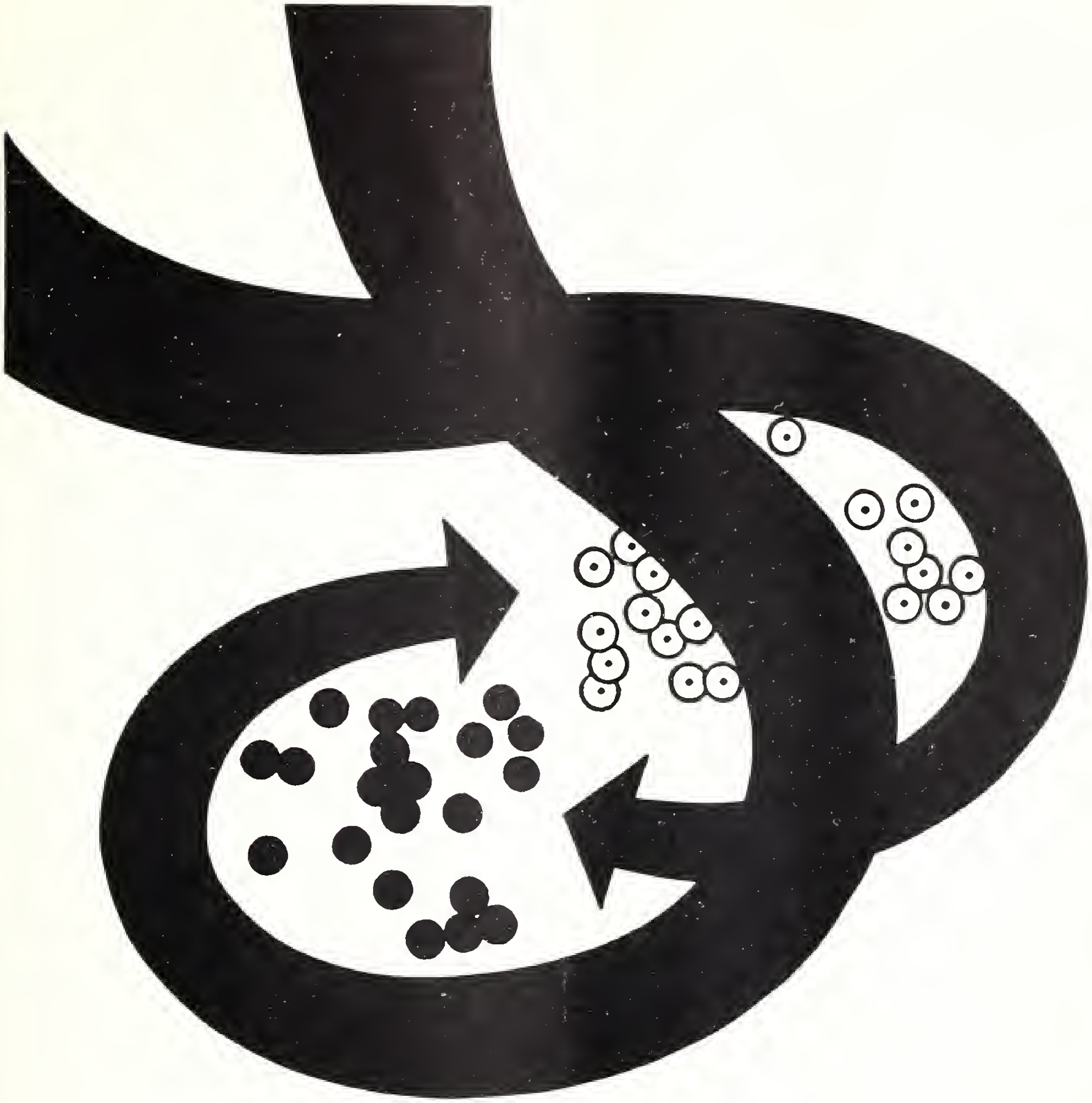
WASHINGTON UNIVERSITY

Appointments

The appointment of 21 new members to the faculty of the Washington University School of Medicine was announced in August. Appointed visiting professors were Dr. J. Harold Burn, pharmacology, and Dr. Robert H. Heptinstall, pathology. Dr. Burn, who was also visiting professor from August until February of the 1959-60 academic year, received the degrees of bachelor of medicine and doctor of medicine from Guy's Hospital, London. He was professor and head of the department of pharmacology, Oxford University, from 1937 until last year and now holds the rank of professor emeritus. Also from England, Dr. Hepinstall is a member of the department of pathology, St. Mary's Hospital Medical School, London.

Named visiting assisting professor of pharmacology was Dr. Hakan Arvidsson of Stockholm, Sweden. Dr. Arvidsson, who received the degree of doctor of medicine from The Karolinska Institute in 1951, did research at South Hospital, Stockholm, from 1952 until this year.

Dr. William J. S. Still, appointed visiting assistant professor of pathology, received the doctor of medicine degree from the University of Aberdeen, Scotland, and has been lecturer in pathology at the University of London since 1957.



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Dr. Hiromichi T. Narahara has been appointed a permanent member of the faculty, with the rank of assistant professor of biochemistry. A graduate of the College of Physicians and Surgeons, Columbia University, with the degree of doctor of medicine, Dr. Narahara did medical research at the University of Washington from 1953 to 1958 and since then has done advanced study at Washington University on a U. S. Public Health Service fellowship.

Others appointed to the medical school faculty are: Instructors: Dr. Kaye H. Kilburn, internal medicine; Miss Mae Ruth Lundell, psychology and social work, department of psychiatry and neurology; Dr. William H. McAlister, radiology; Dr. Peter A. Morrin, medicine; Dr. Charles W. Parker, medicine. Research instructors: Norman L. Corah, medical psychology; Dr. Ellen Evans Smith, pharmacology; Dr. Tsuyoshi Yamashita, ophthalmology. Research assistants: Dr. Pedro Luis M. Albernaz, otolaryngology; Taisija de Gubareff, physiology; Miss Carmelita G. Lowry, biochemistry; Mrs. Susan McNicol, preventive medicine; Robert H. Moulton, physiology; Miss Alice R. Sugg, pathology; and assistant in psychiatric social work, Howard I. Buchbinder.

Dr. Wendell G. Scott, professor of clinical radiology, has been named a member of the advisory committee for "Grand Rounds," a series of national postgraduate medical telecasts for physicians and medical students. Each 90-minute program provides a forum for discussion of actual case problems at the bedside; analysis of new operative procedures and laboratory technics and interchange of ideas among leading professors of surgery and medicine from this country and abroad.

Leaves of Absence

Five faculty members have been granted leaves of absence to conduct scientific research at various hospitals and universities. Dr. Bruce L. Picken, assistant in psychiatry and neurology, will spend two years in the medical genetics department at the University of Wisconsin. Released for one year leaves of absence are Dr. Max Forbes, assistant in ophthalmology, who will go to Columbia University ophthalmology department; Dr. Erik Carlsson, assistant professor of radiology, to The Karolinska Institute, Stockholm, Sweden; Dr. Bernard Wortman, research assistant professor of ophthalmology, who will be a National Institute of Health trainee at the Pharmacology Institute, University of Uppsala, Sweden; and Dr. Kaye H. Kilburn, instructor in internal medicine, to Brompton Hospital, London.

Congresses

Three Washington University staff members participated in the Fifth International Congress on Nutrition in September in Washington, D. C. Dr. Helen Burch, associate professor of pharmacology, discussed recent Medical School research regarding alterations in metabolic processes produced by riboflavin deficiency. Dr. Burch was assisted in this investigation by Dr. F. E. Hunter, Jr., professor of pharmacology, and Dr. Sarah Luse, associate professor of anatomy and pathology. Dr. Harold Rosenthal, assistant professor of physiological chemistry at the School of Dentistry, described research involving the action of Vitamin B 12 in the kidney during starvation. Dr. W. Stanley Hartroft, Mallinckrodt professor and head of the department of pathology at the Medical School, represented the United States in a panel on "Lipids in Health and Disease." He discussed the pathology of lipid disorders. Scientific investigators from Germany, Sweden, South Africa, England and Scotland completed this panel.

Subjects of the congress sessions included an evaluation of nutritional status in man, effects of processing and additives on food, animal nutrition and food production, nutrition in maternal and infant feeding, proteins and amino acids in nutrition, and the prospect of meeting protein needs.

Dr. William Sleator, Jr., Associate Professor of Biophysics in Physiology at Washington University School of Medicine, reported on the "Effects of Calcium, Acetylocholine and Epinephrine on Action Potentials of Human Atrial Muscle in Vitro" at a session of the American Physiological Society last August at Stanford Medical Center, Palo Alto, California. The work was conducted in the department of physiology at the Medical School, in collaboration with Taisija de Gubareff, research assistant.

Gift

A check for $5,000 has been presented by the Fern Waldman Memorial Fund to St. Louis Children's Hospital for research on leukemia and cancer affecting children. The money was given to Dr. William G. Klingberg, associate professor of pediatrics, and Dr. Barbara Jones, assistant professor of pediatrics, and it will be used for a fellowship and another of study by Dr. Ayhan Okcuoglu of Turkey, research technician. The fund was established by Mrs. Meyer Waldman whose daughter, Fern, died of leukemia. St. Louis Children's Hospital has received $52,000 from the fund.

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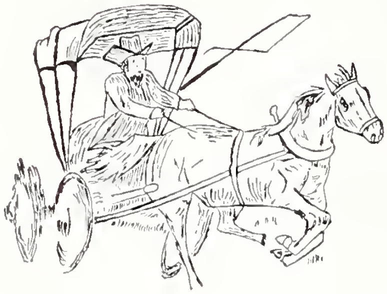
Missouri Medicine in Review



FORTY YEARS AGO

The St. Louis Tuberculosis Society has created a medical advisory committee for the purpose of bringing the influence of medical practitioners and medical institutions to the assistance of the society in the control of tuberculosis.

Amendment No. 8 on the ballot at the forthcoming election provides for a system of taxation to enable the state to assist the blind. The legislature has twice passed the bills appropriating funds to help the blind but in each instance the bills were vetoed because of insufficient funds in the state treasury to meet the cost of giving the blind this worthy help.

According to an announcement made by Surgeon-General Hugh S. Cumming, the magnificent tuberculosis sanatorium heretofore operated by the Army authorities at Fort Bayard, N. M., has been transferred to the U. S. Public Health Service and will soon be available for treating discharged disabled soldiers.

The silver jubilee meeting of the American Academy of Ophthalmology and Otolaryngology will take place in Kansas City, October 14 to 16. This meeting should be of interest for Missourians for the reason that this society was organized in Kansas City in January 1896. The organization was first called the Western Society of Eye, Ear, Nose and Throat Surgeons.

TWENTY-FIVE YEARS AGO

The new president of the Missouri Woman's Auxiliary is Mrs. M. Pinson Neal, Columbia, wife of Dr. Neal of the medical faculty of the University of Missouri. Mrs. Neal was born and educated in New York City and is a graduate nurse. She occupied positions of responsibility in her field in New York City and was for six years superintendent of Winyah Sanitarium, Asheville, N. C.

Dr. Lynn M. Garner, Tuscumbia, was elected president-elect of the Missouri Public Health Association at the joint session with the Missouri Tuberculosis Association held in Kansas City, September 5 to 7. Dr. J. F. Bredeck, St. Louis, is president. Dr. Irl B. Krause, Jefferson City, was reelected president of the Missouri Tuberculosis Association.

Dr. Horace Soper, St. Louis, was a delegate to the First International Congress on Gastro-Enterology held in Brussels, Belgium, August 8 to 10.

The Jasper County Medical Society met in special session September 11 with 31 members present. The purpose of the meeting was to discuss the possibility of establishing a Medical and Dental Credit Bureau in Joplin. Dr. W. S. Loveland, Joplin, called on Dr. R. M. James, Joplin, who has been studying the plan, to explain it to the society. Dr. James related what he had learned at a meeting which he attended several weeks previously in St. Louis.

TEN YEARS AGO

Buford G. Hamilton, M.D., Jefferson City, Health Commissioner, was a speaker at a county wide meeting of the Ray County Health Council at Richmond on August 14.

R. E. Breuer, M.D., Newburg, was elected president of the staff of the Phelps County Memorial Hospital at a meeting of the Phelps-Crawford-Dent-Pulaski County Medical Society on August 4.

Wendell G. Scott, M.D., St. Louis, will present the annual Carmen Lecture at the 36th annual meeting of the Radiological Society of North America which meets in Chicago December 10 to 15.

The total enrollment in the 72 medical and seven basic science schools for the academic year 1949-1950 was 25,103. This represents an increase of 1,433 students, or 6 per cent, over the preceding year. The latest total is double the enrollment in 1910 (12,530), about 18 per cent higher than ten years ago and even larger than during the years of World War II when extra classes were enrolled in all medical schools on an accelerated program. From July 1, 1949, to June 30, 1950, 5,553 physicians were graduated from approved medical schools in the United States, an increase of 459 over the preceding year.

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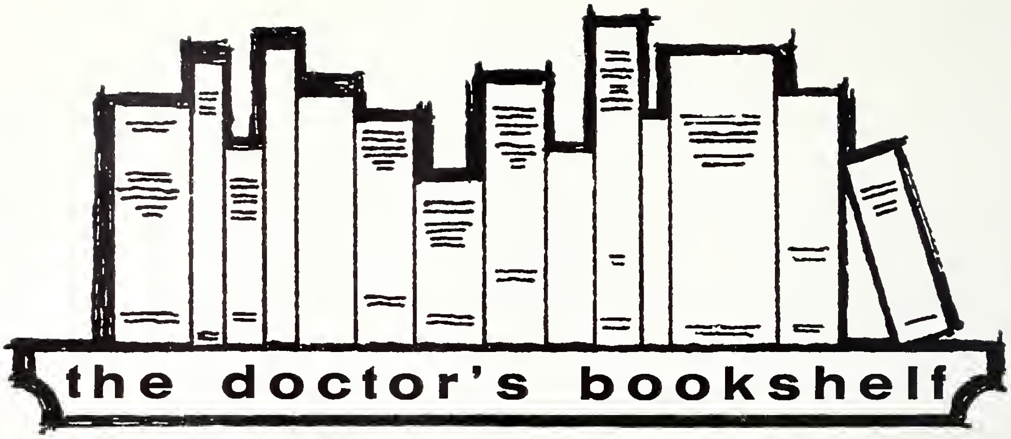

BOOKS RECEIVED

The List Method of Psychotherapy, by Elizabeth Sher, Eleanor Messing, Theodora Hirschhorn, Enis Post, Annette Davis and Arthur Messing. Philosophical Library, New York, 1960. Price $7.50.

Medical, Surgical and Gynecological Complications of Pregnancy, by the Staff of the Mount Sinai Hospital, New York City, edited by Alan F. Guttmacher, M.D., and Joseph J. Rovinsky, M.D. The Williams & Wilkins Company, Baltimore, 1960. Price $16.50.

Ciba, Virus Virulence and Pathogenicity, edited by G. E. W. Wolstenholme, O.B.E., M.A., M.B., M.R.C.P.; and Cecilia M. O'Connor, B.S. Little, Brown and Company, Boston, 1960.

Nine Months' Reading, A Medical Guide for Pregnant Women, by Robert E. Hall, M.D. Doubleday & Company, Inc., Garden City, New York, 1960. Price $2.95.

From Fish to Philosopher, The Story of Our Internal Environment, by Homer W. Smith. Second Edition. Ciba, 1959.

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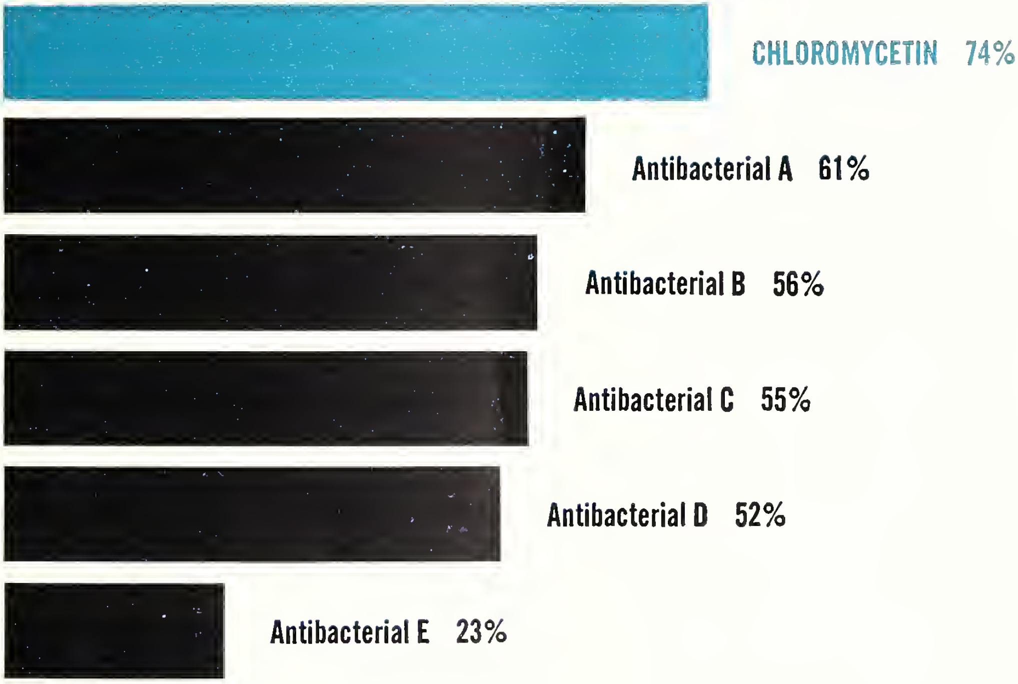

*Adapted from Goodier & Parry[1]

Missouri Medicine

THE JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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Curiosa et Trivia

WILLIAM B. McCUNNIFF

Fat solvents—$100,000,000! Annual American expenditure for *over-the-counter* "weight-reducing" preparations . . . most of which are valueless. No figures on the amount spent on calories in excess of the physiological need.

Physician's Fee Bill adopted by Wright County Medical Society August 3, 1916, includes: Night calls in town, $2.00; natural delivery in town (not over 4 hr.), $10.00, for detention thereafter, per hour, $1.00; administering of anesthetic, $2.50 to $10.00; fracture of ankle or leg, $20.00 to $30.00; spraying nose or throat, 50 cents; vaccination, $1.00 (revaccination without charge if no take).

When Gerhard Domagk was awarded the Nobel Prize for discovery of the sulfonamides in 1939, he sent a letter of thanks. A month later, at the "behest" of the Gastapo, he repudiated the prize. When he finally delivered his Nobel lecture and received the gold medal in 1947, the time had run out for the award of the prize money.

Capsule Clinics

- Seminal plasma of normal human semen stimulates motility of sluggish spermatozoa. Conversely, seminal plasma of oligospermic semen decreases the motility of spermatozoa obtained from semen of good quality. Rozin, S., et al., Fertility & Sterility **11**:278, 1960.
- The disease originally described by Berger cannot be distinguished from atherosclerosis, systemic embolization or peripheral thrombosis. Berger's disease is not a clinical entity and the term should be discarded. Wessler, S., et al., New England J. M. **262**:1150, 1960.
- Bacteria cultured from the vagina and those from the newborn infant's respiratory tract are usually identical. Benirschke, K., J. Dis. Child. **99**:714, 1960.
- No essential change occurs in the basic reactivity of skin following dermabrasion. Jones, W. N., et al. J. Invest. Dermatol. **34**:259, 1960.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

Health Care for the Aged

In a joint press statement, on September 27, Dr. E. Vincent Askey, President of the American Medical Association, and Frank S. Groner, President of the American Hospital Association, praised the law on medical care for the aged passed by the Congress as "a distinct step forward in meeting the need of those older citizens who are unable to finance their own medical and hospital expenses."

Dr. Askey said the American Medical Association will hold a meeting in late November to discuss ways of implementing the new law. He added: "We strongly supported the Kerr-Mills Amendment to the Social Security law providing for the grants-in-aid medical care program for needy and near needy older persons, and we intend to take every possible action to see that the law is implemented quickly and effectively."

Doctors for Kennedy

According to the *Washington Report on the Medical Sciences*, a Doctors for Kennedy committee, composed of 25 medical leaders, is to be set up. Organization at state levels is contemplated. The group will coordinate its activities with Senior Citizens for Kennedy, and the aim will be to sell the candidate's pledge to work for medical care under the Social Security set-up.

A 78 year old Boston physician, Dr. Frederick L. Good, was named as the head of the national committee. It is reported that Dr. Good brought Democratic presidential nominee, John F. Kennedy, and all eight of his brothers and sisters into the world.

New Publications

The Department of Health, Education and Welfare is publishing a new monthly report, called "Health, Education and Welfare Indicators." It will contain current statistical data on birth, death and marriage rates, consumer costs of medical services, hospital construction, new drug application, social security benefits and other national developments. The publication is obtainable by subscription ($3.50 per year) from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

"Older Persons: Selected Health Characteristics" is another publication recently made available. It is obtainable from the U. S. National Health Survey, Public Health Service, Washington 25, D. C.

It is a report on the latest in a series of National Health Surveys and deals with the illness problems of persons in this country more than 65 years of age. The survey covered 235,000 persons and was done between 1957 and 1959 based on a house-to-house questioning.

Federal Employee Insurance Plan

It is expected that it will take several months for possible retired recipients or participators in the new health insurance program which the President signed into law on September 9 to be located. These are in addition to present employees of the government who became eligible on July 1, 1960. They will then be asked their wishes as to participation or nonparticipation in the program. A figure of 415,000 was used by Congress and the Civil Service Commission in estimating the number of employees and their survivors to be covered, but it is realized that this is an estimate and that the figure may be higher or lower. On the figure used, the government would contribute upward of $15 million yearly.

Possibility of Doctor Draft

Replies from draft-vulnerable interns indicates that few elicited preference for starting their military duty when they complete their present internship, or next July 1. It is estimated by the Pentagon that there will be more than 500 Medical Corps vacancies at the time present interns finish their internship. Selective Service, without doubt, will be called upon to furnish the several hundred that are estimated will be needed.

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[1] Clinical reports in files of A. H. Robins Co., Inc., from: J. Allen, Madison, Wisc., B. Billow, New York, N. Y., B. Decker, Richmond, Va., C. Freeman, Jr., Augusta, Ga., R. B. Gordon, New York, N. Y., J. E. Holmblad, Schenectady, N. Y., L. Levy, New York, N. Y., N. LoBue, Chicago Heights, Ill., H. Nachman, Richmond, Va., A. Poindexter, Los Angeles, Cal., E. Rogers, Brooklyn, N. Y., K. H. Strong, Fairfield, Ia.

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Across
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Constitutional Amendment No. 2

Constitutional Amendment No. 2, to be acted upon by the voters in the general election Tuesday, November 8, provides that salaries of members of the Legislature may be fixed by law; that members of the Legislature shall receive 10 cents for each mile traveled in going to and returning from their place of meeting, twice per month, and necessary expenses not to exceed $10.00 per day; and that regular legislative sessions may continue until July 15 with no consideration of bills after June 30.

The Board of Trustees of the Missouri Public Expenditure Survey at a recent meeting voted approval of Constitutional Amendment No. 2 for the following reasons:

> Purchasing power of the dollar had declined 44 cents since the present $125-a-month salary of Missouri legislators was set by an amendment to the state constitution adopted in 1942.
>
> The present constitutionally set salary entails unreasonable financial sacrifice on the part of those who serve in the Missouri General Assembly.
>
> The state of Missouri will be the loser if this outmoded salary provision is permitted to continue to discourage service by its citizens in the legislature.

Missouri Doctors in Politics

Three members of the Missouri State Medical Association will be among those who are running for public office in the General Election, Tuesday, November 8.

In the Seventh Congressional District, **Durward G. Hall,** M.D., Springfield, is running for Congress. Dr. Hall, a Republican, is one of the four delegates to the American Medical Association from Missouri, having been reelected to that office last March at the annual session of the M.S.M.A. Dr. Hall, a native Missourian, has been active in civic affairs and service organizations. He is a graduate of Rush Medical School. His opponent is Charles H. Brown, Springfield.

The Seventh District comprises the following counties: McDonald, Newton, Jasper, Barry, Lawrence, Dade, Cedar, St. Clair, Polk, Greene, Christian, Stone, Taney, Ozark, Douglas, Webster, and Wright.

Luke B. Knese, M.D., St. Louis, is running for reelection as State Representative in the Missouri House of Representatives from the 4th St. Louis District. Dr. Knese, a Democrat, a native Missourian, is a graduate of St. Louis University School of Medicine and also of St. Louis University School of Law. He was a member of the Committee on Public Health in the last session of the State Legislature.

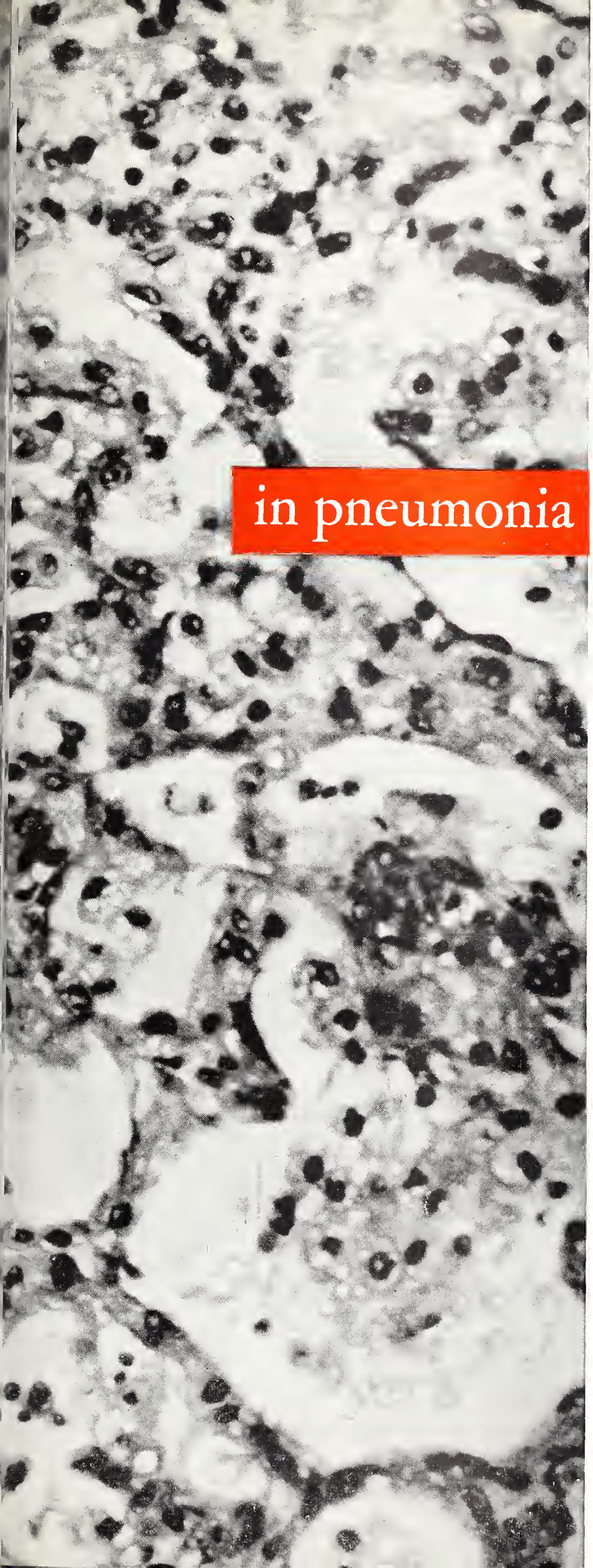
J. J. Wimp, M.D., Kirksville, is running for reelection as State Representative from Adair County. Dr. Wimp, a Democrat, is a member of the Council of the M.S.M.A. from the Second Councilor District. He is graduate of Washington University School of Medicine.

St. Louis Division of Health Reports

The annual report for the year 1959 was recently released by the City of St. Louis Division of Health. It terms the creation in January 1959 of the new Department of Health and Hospitals, brought about by a charter amendment, as an event of major public health significance. The same charter amendment reestablished a Board of Health, abolished in 1914 when the present city charter was adopted.

A few of the statistics listed in the report show that 20,197 babies were born in 1959, for a live birth rate of 23.5 per 1,000 population, as compared to 24.2 in 1958. The infant death rate for 1959 was 29.0 per 1,000 live births, the lowest infant death rate recorded since 1956. The maternal mortality record showed seven resident deaths ascribed to maternal causes.

A total resident death rate of 10,002 was recorded, a rate of 11.6 per 1,000 population. Diseases of the heart and cancer continued as leading causes of death, with 38 per cent of the total deaths due to heart disease and 17 per cent to cancer.



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JOHN F. PEARL, M.D.

Missouri Academy of General Practice

The 12th Annual Scientific Assembly, Hotel Chase, St. Louis

PROGRAM

9:00 a.m.
Business
Session

Saturday, November 5, 10:00 a.m.

SYMPOSIUM ON NEUROLOGY AND PSYCHIATRY

Practical Treatment of Depression, Kenneth Appel, M.D., Philadelphia, Professor of Psychiatry and Chairman of the Department, University of Pennsylvania School of Medicine.

The Multiple Sclerosis Syndrome, Walter L. Moore, M.D., St. Louis, Assistant Professor of Clinical Neurology and Psychiatry, St. Louis University School of Medicine.

The Depressive States and Suicide: Its Importance to the General Practitioner, Robert J. Mueller, M.D., St. Louis, Instructor in Neuro-Psychiatry, Washington University School of Medicine.

Trends in Modern Psychiatry and Their Development, Kenneth Appel, M.D., Philadelphia.

Panel Discussion on Neurology and Psychiatry.

SYMPOSIUM ON MEDICINE, 2:00 p.m.

Learning to Like the Patient With Functional Disease, E. H. Rynearson, M.D., Rochester, Chairman of Sections of Metabolic Diseases, Mayo Clinic.

Effective Use of the Low Salt Diet, Robert A. Schneider, M.D., Oklahoma City, Associate Professor of Medicine and of Psychiatry, Neurology and Behavior Sciences, University of Oklahoma School of Medicine.

The Problem of Jaundice in Females, William A. Knight, Jr., M.D., St. Louis, Associate Professor of Internal Medicine, St. Louis University School of Medicine.

Clinical Disturbances of the Pituitary Gland, E. H. Rynearson, M.D., Rochester.

Management of Migraine Headache, Robert A. Schneider, M.D., Oklahoma City.

Panel Discussion on Medicine.

PRESIDENT'S INSTALLATION BANQUET, 7:30 p.m.

President's Installation Banquet, Mr. Chester Lauck ("Lum" of "Lum and Abner") of the Continental Oil Company, Houston, Texas, Speaker.

Sunday, November 6, 9:00 a.m.

GENERAL SCIENTIFIC SESSION

Pediatric Urological Problems: What the General Practitioner Should Know About Them, Elmer Hess, M.D., Erie, Pa., Urologist and Past President, American Medical Association.

Eye Injuries: General Medical Evaluation and Management, John A. Buesseler, M.D., Columbia, Associate Professor and Chief of Ophthalmology, University of Missouri School of Medicine.

The Changing Character of Pulmonary Infection, L. R. Sante, M.D., St. Louis, Professor and Director of Department of Radiology, St. Louis University School of Medicine.

What Can Be Done for Deafness, T. E. Walsh, M.D., St. Louis, Professor of Otolaryngology and Head of the Department, Washington University School of Medicine.

Growth and Development of Family Physicians, Vernon E. Wilson, M.D., Columbia, Dean, University of Missouri School of Medicine.

Urological Differential Diagnosis: What the Generalist Should Suspect From the History and Physical, Elmer Hess, M.D., Erie, Pa.

Panel Discussion.

SYMPOSIUM ON SURGERY, 1:30 p.m.

Diverticulitis, C. W. Mayo, M.D., Rochester, Surgeon to the Mayo Clinic.

Modern Trends in the Basic Physiology and Treatment of Hyperthyroidism, Brown M. Dobyns, M.D., Cleveland, Professor of Surgery, Western Reserve University School of Medicine.

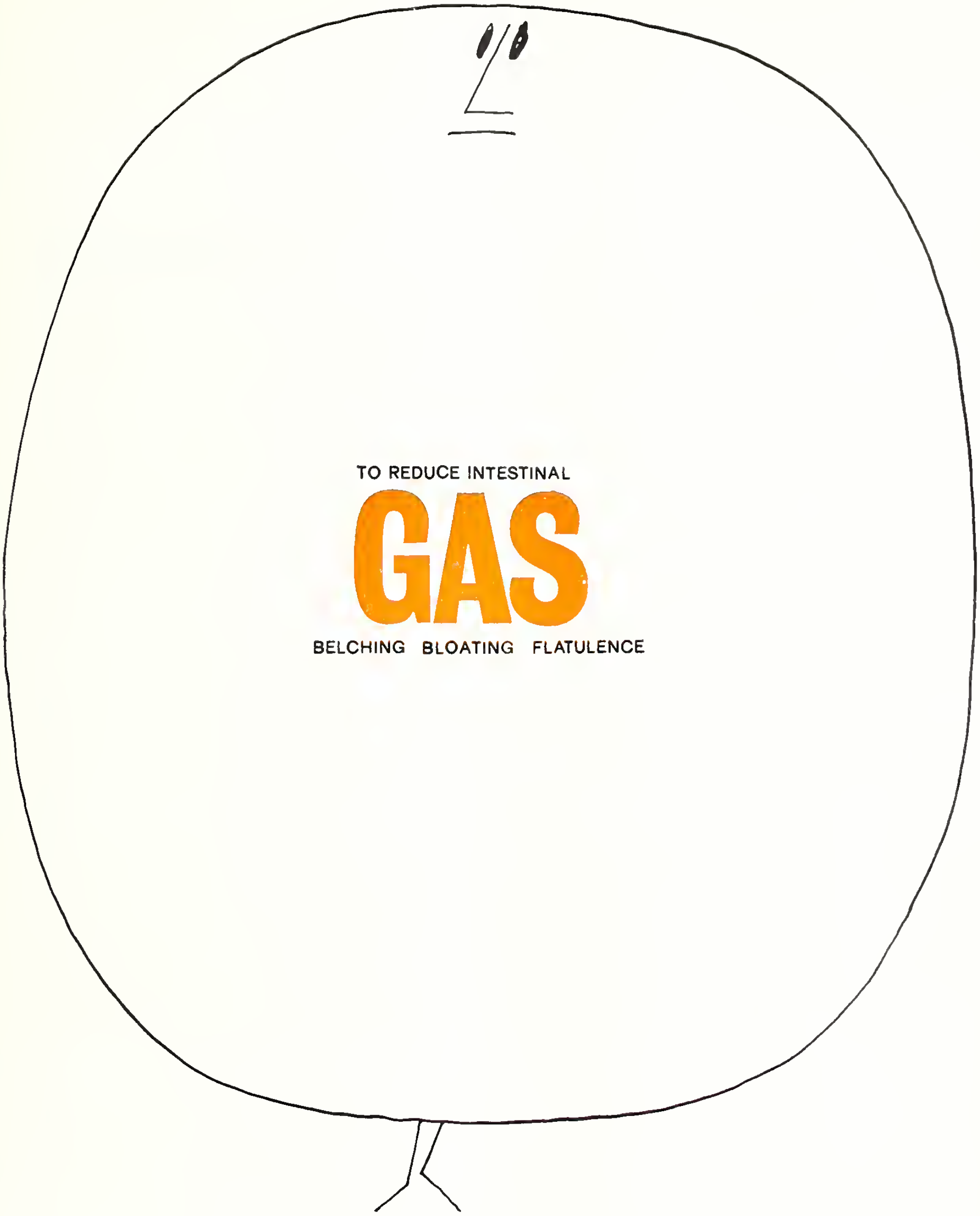
Diagnosis and Treatment of Heart Failure in the Operating Room, Kenneth K. Keown, M.D., Columbia, Professor and Chairman of the Department of Anesthesiology, University of Missouri School of Medicine.

Results of Various Operations for Urinary Diversion, Eugene M. Bricker, M.D., St. Louis, Associate Professor of Clinical Surgery, Washington University School of Medicine.

Tumors of the Thyroid and Their Management, Brown M. Dobyns, M.D., Cleveland.

Terminal Ileitis, C. W. Mayo, M.D., Rochester.

Panel Discussion on Surgery.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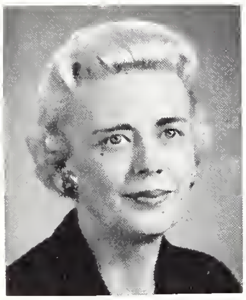
Woman's Auxiliary

The realization that he is wanted and needed is important to every individual to make him a completely happy, well-adjusted human being. When those we love call upon us for our help we are honored and deeply gratified. Our Medical Association wants us and needs us, and has honored us by calling for the State Auxiliary's help. They have asked the State Auxiliary to compile a Medical Resources Directory, which will list all agencies offering medically-oriented services that the practicing physician can call upon to obtain specialized care or treatment for his patients, particularly those who are indigent or medically indigent. As far as is known, this directory, once completed, will be unique in the nation, and each physician will have in his hand a directory to which he can refer to find not only the name of an agency, but also the requirements for eligibility for treatment provided, and the costs of such treatment.



Mrs. Jordan Kelling

Since the important thing is to discover all the agencies providing medically-oriented services in order to make the directory as complete as possible, this work must be done on a local level, and each county, and each individual member will have an important part to play. Dr. R. O. Muether, President of the Missouri State Medical Association, honored us by being our luncheon speaker at our recent Fall Board meeting in Jefferson City. Dr. Muether outlined this project for us, and all who were there to hear him felt that we can successfully accomplish this important task which our doctors have asked their wives to do.

Here is a tremendous opportunity for the Woman's Auxiliary to render a real service to the physicians and people of the state! The information that we shall gather will be obtained from each agency through personal, telephone and mail contacts, and the filling out of questionnaires. The information that we shall be required to collect will be specific, so that there will be complete uniformity throughout the state when the material is correlated into a finished directory.

Let's take off our coats and go to work when we receive our specific orders!

"If only . . . !" How often we say that with a sigh! Now we are sighing, "If only everyone in the State Auxiliary could have been with us at Fall Board meeting!" The sun shone bright, making the traveling easy, and seventy-two board members and other Auxiliary members from around the state were there at noon on the opening day for our buffet luncheon and the workshop.

"An Informed Membership in Action" is our state theme, and nine distinguished men were present to give us accurate information in five of our departments. Dr. Louis H. Kohler, Dr. Addison M. Duval and Dr. Stanley S. Peterson participated in a panel dealing with the "Problems of Aging and Mental Health." Dr. Joseph K. Russel of the Division of Health, Mr. Jack L. Simeon of the State Civil Defense Agency, and Lt. Col. E. I. Hockaday of the Missouri Highway Patrol were the members of a panel on "Civil Defense and Safety"; while Dr. Vernon E. Wilson, Dean of the School of Medicine, Missouri University, Mr. Charles Foster of Guidance Services, State Department of Education, and Mr. David A. Gee, Chairman of Careers Recruitment, Missouri Hospital Association, covered the subject of "Careers Recruitment."

The Cole County Auxiliary rolled out the red carpet for us, and their doctors extended a cordial hand of welcome. Many of the doctors' children, along with their friends, entertained us at the banquet Tuesday night, and the Cole County Doctors' Quartet was worth traveling across the state to hear. Since that night a question has turned itself around in your President's mind: "How many Missouri doctors love to sing and have beautiful voices?" And then we hear the imaginary music roll out from a great chorus of these Missouri doctors' voices.

You have all seen many spotlights playing on one object. Such was the impression we carried away from the Governor's Conference on Mental Health where your President represented our Auxiliary as a member of the committee. So many strong lights were brought to bear on the

(Continued on page 1438)

e physician listens to a tense, nervous patient cuss her emotional problems. To help her, he escribes Meprospan® (400 mg.), the only conuous-release form of meprobamate.

The patient takes one Meprospan-400 capsule at breakfast. She has been suffering from recurring states of anxiety which have no organic etiology.

e stays calm while on Meprospan, even under e pressure of busy, crowded supermarket shopng. And she is not likely to experience any tonomic side reactions, sleepiness or other scomfort.

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elaxed, alert, attentive . . . she is able to listen refully to P.T.A. proposals. For Meprospan es not affect either her mental or her physical ficiency.

Peacefully asleep . . . she rests, undisturbed by nervousness or tension. (Samples and literature on Meprospan available from Wallace Laboratories, Cranbury, N. J.)

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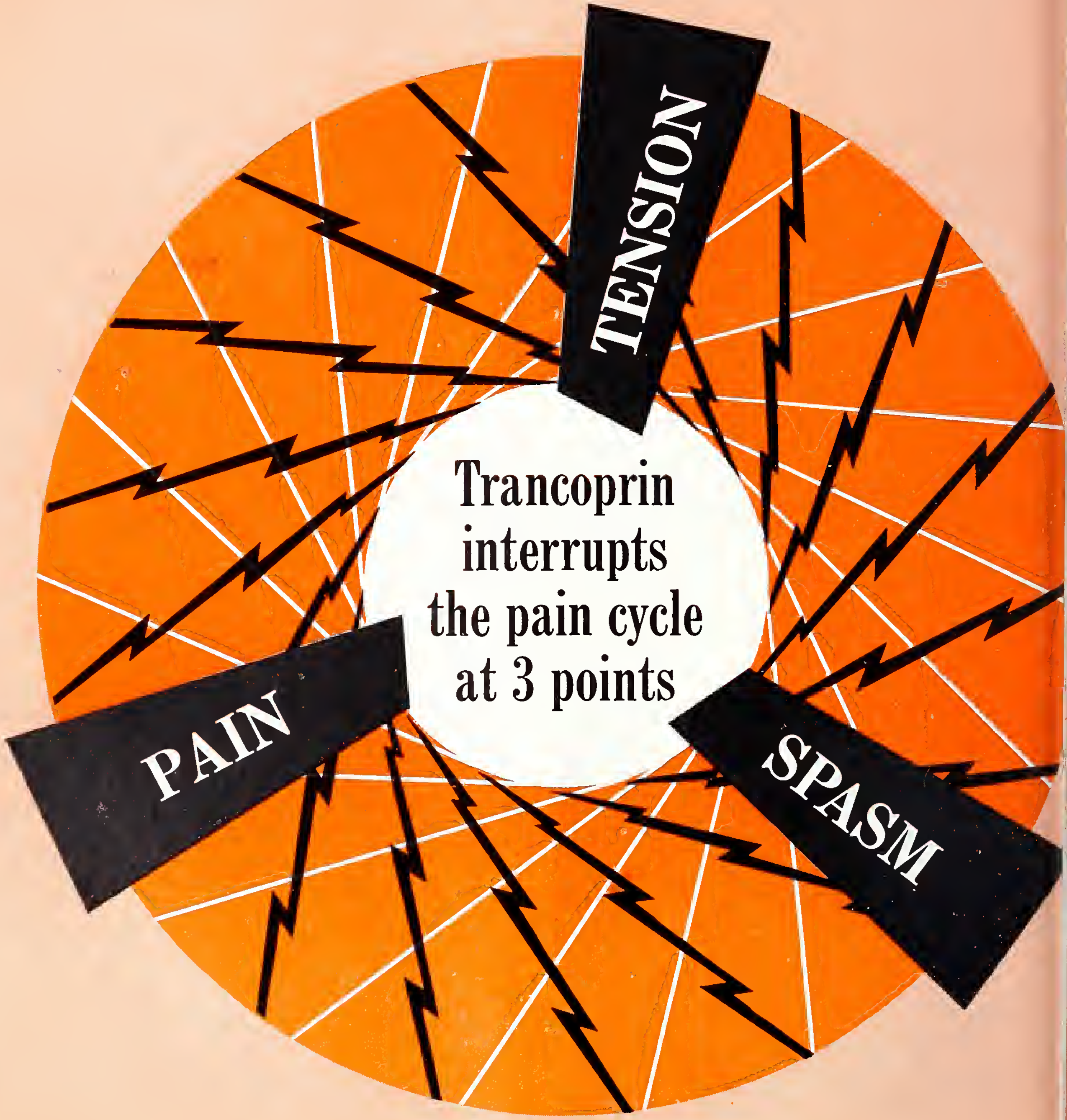
TENSION
Trancoprin interrupts the pain cycle at 3 points
PAIN
SPASM

Volume 57, Number 11—November, 1960

Missouri Medicine

JOURNAL OF THE MISSOURI STATE MEDICAL ASSOCIATION

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O. W. THEEL, M.D., *Kansas City*

Clinical Experience With a New Long-Acting Vitamin B_{12}, Ducobee Depot

Benefits of intramuscular injections of a new specific long-acting vitamin B_{12} in various diseases, and of various intensity, are presented.

Dr. Theel is a graduate of the University of Kansas School of Medicine.

VITAMIN B_{12} HAS found its most valuable application in the treatment of pernicious anemia and the basis for its effectiveness is well understood.[1] Neurologic conditions not associated with pernicious anemia, such as diabetic, alcoholic and nutritional neuropathies, peripheral neuritis, trigeminal neuralgia and primary degenerative diseases of the central nervous system have also responded to treatment with vitamin B_{12}.[2] Other miscellaneous conditions reported to improve after the vitamin include herpes zoster,[2, 3] Meniere's disease,[2] osteoarthritis,[4] viral hepatitis,[5] Bell's palsy[2] and the post-gastrectomy syndrome.[6]

A partial, but not complete, explanation for these findings may be sought in the known pharmacologic properties of vitamin B_{12}. It is necessary for normal blood formation, growth and nutrition. The vitamin is important in the metabolism of neural tissue in the central and peripheral nervous systems, although its exact role has not yet been determined. Vitamin B_{12} has lipotropic activity which may prevent or correct fatty infiltration of the liver due to dietary insufficiency and it influences carbohydrate and fat metabolism.[1]

Many physicians are familiar with the beneficial effects of vitamin B_{12} in a variety of conditions encountered in general practice although their experiences may not be documented. Such reports, together with published studies, have prompted a trial of the vitamin in patients, with and without demonstrable pathology, whose predominant symptoms were fatigue, anxiety, depression and anorexia. A special repository form of vitamin B_{12} was employed for reasons which will be briefly explored.

One of the drawbacks of an aqueous preparation of vitamin B_{12} is rapid urinary excretion; repeated injections become necessary to maintain an effective therapeutic response. Recent attempts to overcome this disadvantage have resulted in a formulation of the vitamin in a vehicle of sesame oil and aluminum monostearate (Ducobee® Depot).* In contrast to aqueous vitamin B_{12} preparations, which were almost completely excreted by normal subjects in two or three days, Ducobee Depot produced significantly elevated serum levels for one to two weeks following a single intramuscular injection.[7, 10, 11] The convenience to both patient and physician of spaced injections, yet continuous, slowly-released therapeutic action, is obvious.

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* Ducobee® Depot (brand of cyanocobalamin, vitamin B_{12}), George A. Breon & Company.

Materials and Method

A group of 40 patients, 16 male and 24 female, was treated with intramuscular injections of a long-acting vitamin B_{12} preparation, Ducobee Depot. Table 1 indicates the diagnoses made; most patients showed either mild, chronic underlying disease, or had no evidence of pathology. The chief complaint of all these patients was that "they did not feel themselves." They were unduly nervous, tired, anorexic, irritable and had no energy or enthusiasm for life or work. Some had vague aches and pains for no apparent reason. In eleven patients these symptoms developed, or became more marked, after a recent illness (influenza, gastric ulcerative disease, an upper respiratory infection, herpes zoster), an operation or, in one patient, after childbirth. In six patients there were no abnormal physical findings and the recent history was negative, but symptoms became so troublesome that medical aid was sought. Although ranging in age from 22 to 86 years, most patients were in early or late middle-age (average age 47 years) and, in three women, complaints were associated temporarily with menopause.

TABLE 1

DIAGNOSIS IN 40 PATIENTS TREATED WITH REPOSITORY VITAMIN B_{12}

Diagnosis	*Number of Patients*
Iron deficiency anemia	2
Anxiety or mild depression	5
Arteriosclerosis	4
Hypertension	2
Menopause	3
Post-disease or operation states	14
Normal pathology	6
Miscellaneous (sciatica, obesity, alcoholism, osteoarthritis)	4
TOTAL	40

The dosage of vitamin B_{12} given varied from 1 cc. (1,000 micrograms) twice weekly to 0.5 cc. injected every two weeks. In most instances, the initial dose was 1 cc. each week. In nine patients the starting dose was maintained from two to four weeks, reduced by one half and the reduced amount given for another four or five weeks. Those patients who completed a course of therapy received an average of approximately 4,000 micrograms vitamin B_{12} given over a period of two to 10 weeks before they felt well enough to stop. The other 31 patients continue to receive medication as the chronic nature of their symptoms requires further treatment.

Results

The response to treatment, together with diagnosis, dosage and age of patient, is tabulated in table 2. All patients except one showed some improvement. A differentiation between the amounts of symptomatic relief obtained was made in terms of subjective feelings and the following criteria were adopted: A "very good" response indicated a return to normal, or better than normal, feelings of enthusiasm and energy; no mental or physical exhaustion and a complete absence of presenting symptoms. A "good" response may be defined as improvement rather short of complete; the patient felt better than before treatment, but an optimal state of well-being was not achieved. As shown in table 2, a "very good" response was reported by 16 patients (40 per cent), "good" by 23 patients (57.5 per cent) and only one patient experienced no benefit from the vitamin.

No relationship existed between diagnosis and outcome of vitamin B_{12} therapy. The length of treatment, however, appeared to be associated with the cause of symptoms; those patients who were recovering from an illness and those who were normal except for the original complaints, tended to respond quickly to a short course of injections and were able to function well after therapy was stopped.

There were no local or systemic effects from vitamin B_{12} injections in any patient.

Discussion

It has become increasingly common for the general practitioner to prescribe tranquilizing or stimulant drugs to patients complaining of nervousness, fatigue, mild depression, lack of ambition when such symptoms have little or no physical basis. Widespread use of these drugs has uncovered unpleasant and sometimes dangerous side effects, and they should rarely be recommended except as an adjunct to psychotherapy. It has been demonstrated in this study that vitamin B_{12} can provide rapid, safe and effective relief in such patients, without resort to potent psychotherapeutic agents. In many instances, improvement has been maintained after only one brief injection course.

An explanation of these results will not be attempted, but it may be noted that most of these

TABLE 2

DIAGNOSIS AND RESULT OF TREATMENT WITH REPOSITORY VITAMIN B_{12} IN FORTY PATIENTS

Case Number	*Sex*	*Age*	*Diagnosis*	*Dosage*		*Outcome*
				AMOUNT	DURATION (WEEKS)	
1	F	38	Iron deficiency anemia	1 cc. twice/wk. 1 cc./wk.	2 4	Very good
2	F	30	Acute anxiety	1 cc./wk. 0.5 cc./wk.	3 5	Very good
3	F	46	Acute anxiety	0.5 cc. every 5 days	4	Very good
4	F	72	Arteriosclerotic heart disease	1 cc./wk.	7	Good
5	F	86	Arteriosclerotic heart disease	1 cc. twice/wk. 1 cc./wk.	4	Good
6	M	52	Hypertension; depression	1 cc./wk.	6	Good
7	M	36	Post-influenza	1 cc./twice/wk.	2	Very good
8	F	42	Pre-menopause	1 cc./wk. ½ cc./2 wks.	4 6	Very good
9	F	62	Post upper respiratory infection	1 cc./wk. 0.5 cc./wk.	4	Good
10	M	34	Anxiety; fatigue	1 cc. twice/wk. 0.5 cc./wk.	2	Good
11	F	74	Arteriosclerosis	1 cc./wk.	12	Good
12	M	50	Normal	1 cc. twice/wk. 1 cc./wk.	4	Very good
13	M	42	Post upper respiratory infection	1 cc. every 4 days	3	Very good
14	F	36	Post-influenza	0.5 cc./wk.	4	Good
15	F	68	Hypertension	1 cc./wk. 0.5 cc./wk.	3 3	Good
16	F	42	Normal; fatigue	0.5 cc./wk.	4	Good
17	M	56	Anxiety after therapy for prostate disease	1 cc. every 5 days 1 cc. every 2 wks.	4	Good
18	M	58	Post-gastric ulcer	0.5 cc./wk. 0.5 cc./2 wks.	9 8	Very good
19	F	46	Menopause	0.5 cc./wk.	9	Good
20	M	38	Post upper respiratory infection	1 cc. every 3 days	2	Poor
21	F	24	Normal	0.5 cc./wk.	4	Good
22	F	28	Post-partum	1 cc./wk. 0.5 cc./wk. 0.5 cc. every 2 wks.	4 4	Good
23	M	47	Sciatica	1 cc./wk.	5	Good
24	F	44	Alcoholism	1 cc. every 2 wks.	6	Very good
25	F	49	Mild depression	1 cc./wk. 0.5 cc./wk. 0.5 cc. every 2 wks.	3 2 3	Very good

TABLE 2 *(Continued)*

Case Number	*Sex*	*Age*	*Diagnosis*	*Dosage* AMOUNT	*Dosage* DURATION (WEEKS)	*Outcome*
26	F	63	Obesity	1 cc. every 2 wks.	5	Good
27	M	64	Post-herpes zoster	1 cc. twice/wk.	4	Good
28	M	27	Post upper respiratory infection	0.5 cc./wk.	4	Very good
29	F	81	Arteriosclerosis	1 cc. every 2 wks.	14	Very good
30	F	22	Iron deficiency anemia of pregnancy	1 cc. every 2 wks.	8	Good
31	F	36	Normal; fatigue	1 cc. every 2 wks.	3	Very good
32	M	29	Normal; fatigue	1 cc./wk. 1 cc. every 3 wks.	4 12	Very good
33	F	48	Osteoarthritis	1 cc. every 2 wks.	14	Good
34	F	48	Menopause	1 cc./wk.	8	Good
35	M	37	Post-influenza	1 cc./wk.	4	Very good
36	M	42	Post-partial gastrectomy	0.5 cc./wk.	10	Good
37	F	33	Normal	1 cc./wk. 0.5 cc./wk.	6 4	Good
38	M	42	Post-influenza	1 cc. twice/wk.	2	Very good
39	F	76	Post radiation therapy	1 cc./wk.	6	Good
40	M	22	Post upper respiratory infection	1 cc. twice/wk. 1 cc./wk.	2 2	Good

patients were middle-aged or elderly. It has been established that with increasing age there is a decrease in production of intrinsic factor, a reduction in gastric secretion and impaired intestinal absorption.[8, 9] A diet containing sufficient amounts of vitamin B_{12} might not be adequately utilized by the older person and signs of deficiency may manifest themselves in the symptoms described here. The availability to the organism of vitamin B_{12} from food sources is unknown, however, and such a suggestion must remain speculative.

Summary and Conclusions

The marked benefits of a series of intramuscular injections of a long-acting vitamin B_{12} (Ducobee Depot) preparation in 40 patients were noted. Symptoms associated with arteriosclerosis, hypertension, menopause, anemia, anxiety, sciatica, obesity, alcoholism, osteoarthritis and post-disease or operation states were alleviated. Improvement was also seen in patients with fatigue, nervousness, lack of energy, unrelated to any disease. These observations justify a more widespread use of vitamin B_{12} in the treatment of similar conditions, especially when a complete absence of untoward reactions can be anticipated.

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BENJAMIN MILDER, M.D., *St. Louis*

Visual Rehabilitation for the Near Blind

The problem of helping the person with limited blindness has received attention only in the last decade or so. The role of the Optical Aids Clinic of Washington University School of Medicine in this work is described.

Portions of this paper were taken from an address at the annual meeting of the National Society for the Prevention of Blindness, Denver, March 30, 1960.

The study was supported in part by Demonstration Grant No. 226, Office of Vocational Rehabilitation, of the Department of Health, Education and Welfare.

Dr. Milder is from the Department of Ophthalmology, Washington University School of Medicine, St. Louis.

THE WORD "BLIND," through the ages, has brought with it a connotation of finality and helplessness. In the present day we have come to recognize that all "blindness" is not "sightlessness," and with this recognition has come the need to define the word "blind"; such as "industrial blindness," "tax exemption blindness," "legal blindness," "blind pension" blindness. Defining a limit of blindness suggests the existence of some residual vision. Yet, only in the last decade or so has there been any concerted attention to the problem of helping such persons to achieve maximum utilization of their limited vision. How incredible that the negative implications of a single word can have so paralyzed the will and blunted the initiative of science and society!

It has been estimated that there are 350,000 persons in the United States who are legally blind—that is, whose vision is less than 20/200 in the better eye. About 30,000 new names are added to this group annually. Seventy-five per cent of these people have some residual vision! If, to this number, is added the 1.2 million persons who have a relative visual handicap—that is, with visual acuity in the better eye of 20/200 to 20/70—there is a formidable reservoir of persons who are potential candidates for visual rehabilitation.

Contemporary efforts to probe this reservoir may be traced to the first Optical Aids Clinic, established by Kestenbaum in Vienna in the 1920's. However, a general interest in this subject has been manifest only in the last decade. This interest has developed rapidly, a special impetus having been provided by the Office of Vocational Rehabilitation of the Federal Department of Health, Education and Welfare. In 1958, such a Demonstration Project was begun, under federal grant, at the Washington University School of Medicine in St. Louis. In the Department of Ophthalmology, an Optical Aids Clinic was established to demonstrate whether the fitting of optical aids to persons classified as "blind" (with corrected vision of less than 20/200 in the better eye) can increase their employment opportunities.

The broader purpose, and philosophy, of the Clinic is to exploit to the fullest, the available vision of all persons who have reduced visual acuity. Thus, efforts are directed at young and old, at the limited vision group (less than 20/70), as well as the industrially blind group (less than 20/200).

ORGANIZATION OF THE OPTICAL AIDS CLINIC

Patients are seen at the Optical Aids Clinic on referral from four sources:

1. Public service agencies, such as the Missouri Bureau for the Blind, and its Vocational Rehabilitation Division; Missouri School for the Blind.
2. Private service agencies, such as the St. Louis Lighthouse—Society for the Blind; the St. Louis Rehabilitation Center.
3. University hospital and private hospital clinics.
4. Physicians in private practice.

Each patient is seen by the Clinic team, which consists of: resident physician in Ophthalmology, social worker, optometrist, and consulting ophthalmologist.

Generally, the work of the first three members of the team is performed on one morning, and the conference and consultation with the consultant on the following morning. A nominal fee is charged for this entire patient study, amounting at the present time to $10.00 for the complete study.

Optical aids are provided by the Washington University Optical Shop, at cost.

FACTORS DETERMINING UTILIZATION OF OPTICAL AIDS

Seeing with optical aids and using them are not necessarily synonymous. Many variables enter into the acceptance and use of these special lenses.

1. Chief among these is the existing level of vision. Although optical aid devices are not frequently used for outdoor or "distance" vision, nevertheless the evaluation of distance visual acuity forms a reasonable index for predicting success or failure in the fitting of an optical aid. Studies at the center reveal that ability to read newspaper print (8 point type) with the assistance of an optical aid can be achieved in the vast majority of persons having vision of 12/200 or better.

TABLE 1

RELATIONSHIP OF DISTANCE VISUAL ACUITY TO READING VISUAL ACUITY

Distance Vision (in the better eye, with correcting lenses)	*Total No.*	*Achieve Reading Vision of* 8 PT. OR BETTER	9 TO 12	LESS THAN 12 PT.	*Pct. Who Can Read 8 Pt. Type*
Less than 5/200	13	3	2	8	23
5/200 - 10/200	33	16	11	6	48
12/200 - 20/200	23	17	4	2	73
20/160 - 20/100	39	36	3	0	92
20/80 - 20/60	25	22	3	0	88
20/50 or better	25	25	0	0	100
Totals	158	119	23	16	

Obviously, practical help is not too common for anyone whose vision is less than 5/200 in the better eye. But of 69 patients having 20/200 or less in the better eye, more than half (53.6 per cent) could see 8 point type. About 70 per cent of all patients in the Clinic were supplied with some form of visual aid device, with the number increasing as distance vision levels increase. Table 2 shows that, above 5/200 vision, visual aids were prescribed in approximately equal proportions through all of the levels of vision.

Table 3 shows that, despite the fact that the patients with the poorest visual acuity—and, consequently, the most powerful optical aids—were forced to function at extremely close distances such as 1 or 2 inches, nevertheless they adapted to the limitations of these aids as well as those patients with somewhat better vision. This table shows the proportion of patients achieving "good" or "fair" utilization of their optical aid at various focal distances.

TABLE 2

RELATIONSHIP BETWEEN DISTANCE VISION AND LIKELIHOOD OF PRESCRIBING A VISUAL AID

Distance Vision (in better eye, with correcting lenses)	*Total No.*	*Aid Prescribed*	*Per Cent Visual Aid Prescribed*
Less Than 5/200	12	3	23
5/200 - 10/200	33	23	69
12/200 - 20/200	23	20	87
20/160 - 20/100	39	31	80
20/80 - 20/60	25	17	68
20/50	13	8	62
20/40 or better	13	8	62
Totals	159	110*	69.2

* Several patients received more than one type of optical aid.

TABLE 3

READING DISTANCE AND UTILIZATION OF OPTICAL AID

Reading Distance	*Utilization of Aid* GOOD	FAIR	POOR	NO INFO.	*Total of "Good" or "Fair"* NO.	PCT.
1 to 1½"	6	1	3	0	10	70
2 to 2½"	7	5	2	3	17	71
3 to 3½"	10	1	5	1	17	65
4 to 4½"	5	5	0	1	11	91
5 to 8"	21	5	9	11	46	57
9" or more	5	5	0	1	11	91
Totals	54	22	19	17	112*	68

* Includes aids for distance and near vision

No aid prescribed	44
No information on prescription of aid	3
Total examined	159

2. Recency of the loss of vision is a factor in using aids. It is widely recognized that the newly blinded cannot readily accept such an altered visual status as the limitations of focal length just shown in table 3. They tend to expect visual aids to restore previous seeing skills and habits.

3. Age has been said to be a factor in the utilization of optical aids. True, age seems to play a part in the use of optical aids, chiefly by virtue of the fact that the largest groups of patients who were referred for examination fell in

the age ranges of "under age 20" (34 per cent) and "over age 60" (41 per cent).

TABLE 4

AGE DISTRIBUTION OF OPTICAL AIDS PRESCRIBED

Ages	*Total No.*	*Aids Prescribed*	*Per Cent Aids Prescribed*	
Age 10 or under	21	12	57	63
Ages 11-20	33	22	67	
Ages 21-30	15	12	80	74
Ages 31-40	1	1	100	
Ages 41-50	8	4	50	
Ages 51-60	15	12	80	
Ages 61-70	27	21	78	71
Ages 71 and over	38	25	68	
Totals	158*	109	69	

* One patient of unknown age not included.

For any given decade, however, the percentage of optical aids prescribed seems to lie between 60 and 80 per cent, being somewhat less in the first decade. This smaller percentage of aids prescribed for children may be due, in part, to the fact that children can generally achieve substantial magnification through their own accommodative efforts.

The proportion of failures increases somewhat with age, and our data indicates that below age 20 only 12 per cent of the aids prescribed were poorly utilized, whereas in the years beyond age 60, 24 per cent were poorly utilized. Apparently the better adaptability of youngsters, and the resistance to change and to new experiences in the oldsters, seems to be manifest here, just as is the refraction experience in the normally sighted population.

4. The pathologic process is said to play a role in the use of optical aids. This is pointed up by the incidence of disease entities for which aids were prescribed.

It would seem that best results occur with retinopathies and macular diseases. However, if one examines the grouping of cases by ocular structure one sees that actually the per cent of patients helped, varied little with the structure primarily involved.

It is immediately apparent that the diseases most frequently helped are those characteristic of the age groups most frequently encountered in this study.

5. Job requirement represents a major factor in the successful use of these lenses. Generally, an alteration of work conditions is necessary to adapt to an optical aid, the usual problem being that these aids function at substantially shorter focal lengths than normal. With practice and some ingenuity this problem often yields to the efforts of the patient. However, ability to read 8 point type at one inch would obviously be of little value in many job situations.

6. By far the most overpowering factor in the successful use of visual aids is the will to make them work. Here the social worker becomes invaluable in exploring and predicting the motivational potential of the patient. Here, too, one encounters problems in the older age groups. Some oldsters just do not want to read sufficiently to sustain them in the necessary reorientation of their reading habits, while youngsters are eager for new learning experiences—even if some extra effort is required.

METHODS OF CORRECTION OF THE VISUAL DEFICIT

A. *Distance Vision.*—The considerable limitations of aids for distance vision have already been mentioned. However, many patients who have subnormal vision will require some form of distance aid. In our series 122 prescriptions were written, 18 of them (15 per cent) to assist distance vision. Most of these patients were, of course, also given some form of optical aid for close work. In about half of the cases a careful distance refraction test provided adequate assistance for distance vision. Patients with irregular corneal scars or other corneal diseases, such as Keratoconus, may be benefited greatly by the use of contact lenses or multiple pinhole spectacles.

B. *Near Vision.*—It has been the experience of all workers in this field that the greatest area of usefulness is found in handling those problems associated with near vision. The devices available for the improvement of reading and other close visual tasks number in the hundreds. The large number of such devices in itself provides a basis for widespread confusion in the proper selection of optical aids. The correct fitting of optical aids must depend not upon the wide variety of devices available or upon the individual bias of the examiner, but, rather upon the specific factors outlined previously having to do with visual acuity, age, job requirement and motivation.

Practically all such devices for improving reading vision will involve: (1) shorter focal

TABLE 5

DISEASE PROCESSES FOR WHICH OPTICAL AIDS WERE PRESCRIBED

Ocular Structure	*Diagnosis*	*No. of Cases*	*Aid Prescribed*	*Pct. Aids Prescribed*
Cornea (10)	Scar of Cornea	7	5	71
	Microcornea	1	1	100
	Keratonus	2	2	100
Iris (5)	Anterior uveitis	1	1	100
	Aniridia	4	2	50
Lens (14)	Cataract, congenital	7	5	71
	Cataract, senile*	5	2	40
	Subluxation of lens	2	1	50
Optic Nerve (18)	Optic atrophy, congen. hered.	12	7	58
	Optic atrophy, acquired	6	4	67
Glaucoma (6)	Glaucoma	6	3	50
Retina-Choroid (50)	Albino	4	3	75
	Chorio-retinitis, inactive	14	10	71
	Chorio-retinal scars, trauma	1	1	100
	Retinopathy, diabetic	18	15	83
	Retinopathy, hypertensive-arteriosclerotic	2	2	100
	Retinitis pigmentosa	2	0	0
	Retrolental fibroplasia	8	3	38
	Retinal detachment	1	1	100
Macula (47)	Mac. degeneration, senile	36	25	69
	Mac. dysplasia, congenital	8	6	75
	Mac. degen., myopic	3	3	100
Nystagmus (7)	Nystagmus, congential**	7	7	100
Miscellaneous (4)	Coloboma, choroid, congen.	2	1	50
	Homonymous hemianopsia	2	2	100
	Totals	161	112	

* Two cataract diagnoses reported also under macular degeneration.
** Only those cases of nystagmus not associated without other diagnoses listed above.

TABLE 5A

DISEASE PROCESSES FOR WHICH OPTICAL AIDS WERE PRESCRIBED

Ocular Structure	*No. of Cases*	*Aid Prescribed*	*Pct. Aids Prescribed*
Cornea	10	8	80
Iris	5	3	60
Lens	14	8	57
Optic Nerve	18	11	61
Glaucoma	6	3	50
Retina-Choroid	50	35	70
Macula	47	34	72
Nystagmus	7	7	100
Miscellaneous	4	3	75
Totals	161	112	69.6

length, (2) smaller field of vision, and (3) interference with the existing distance vision. All of these are obstacles to the utilization of optical aid devices, and the examiner then is responsible for selecting that device which will most nearly fit the specific requirements of the patient and provide the least displacement from former or existing seeing habits. It is the basic function of all of these near vision aids to enlarge the retinal image by magnification.

Why an Optical Aids Clinic?

There are several good reasons.

1. First of all, if it is true that the fitting of optical aids is merely an extrapolation of ordinary refracting methods, then it is equally true that such additional effort requires ad-

ditional time, and this additional time is disproportionately great. In our clinic, about three hours are spent on each patient. It is apparent that such lengthy studies are not possible in a physician's office. This does not mean that the ophthalmologist in private practice is not capable of performing these services—they are rather elementary for any trained ophthalmologist—it is just not practical.

2. In addition to the time factor, the total patient problem often may be understood better in the light of the social worker's appraisal, and we may benefit from such guidance in our specific recommendation. The team effort yields rewards in terms of understanding the patient's limitations as well as his motivations.

3. Further, a clinic provides for the accumulation and evaluation of data, and the opportunity to utilize this information.

4. The therapeutic approach here is exaggerated, painstaking and often repetitious. Each patient enters with a negative, more or less hostile, attitude. His hopes have been built up and dashed against the rocks of disillusionment before. Not only must the physician demonstrate visual improvement, he must also "reach" the patient and establish a rapport. The patient ego must be supported by progressively demonstrating and emphasizing his successes; this may require repeated contacts with the patient.

5. Several deeply rooted superstitions and prejudices can best be overcome in the framework of the clinic as the super-specialist. This atmosphere often provides a climate for acceptance of the examiner's recommendations and pronouncements which is difficult to achieve in the more intimate doctor-patient relationship with the family ophthalmologist.

Here, one can destroy more readily such notions as:

(a) Using the eyes may "hurt" them, and they can be "saved by not reading or sewing."

(b) It is harmful to the eyes to hold print too close (nothing could be farther from the truth; the shorter distance actually gives added magnification, and is only disturbing to the extent of the patient being fatigued if he is forced to exercise more accommodative effort than he can tolerate).

(c) "Strong" glasses hurt the eyes.

These and other unfounded notions are dispelled by example, demonstration, explanation and reassurance.

6. Still another reason for this clinic is the cost of maintaining the necessary equipment and supply of visual devices. Often the working distances and refraction room set-up are different in the Optical Aids Clinic. Most of the refractions are performed at five (or 10) feet distance, rather than the customary 20 feet in the usual ophthalmologist's office. Charts are employed which feature additional graduations in size of the largest letters; these charts are not found in most offices.

7. Training, practice and encouragement of the patient form an important part of the adaptation to an optical aid. With the high magnification devices and short working distances, the patient is limited to a few words at a time (or, even a few letters at a time). He cannot read by scanning, but must learn to read anew, employing the principle of holding the head steady while moving the printed page across the field of view.

The family must be informed so as to be helpful and encouraging. Particularly in the case of children, their seeing potential is realized by the physician, teacher and parents, acting as a coordinated team, often through the interpretive assistance of the social worker.

For all these reasons, an optical aids clinic would seem to justify its existence.

SUMMARY

It should be emphasized that these facilities are available to all patients, of all ages, and that appointments may be secured simply by writing to the Optical Aids Clinic, Washington University School of Medicine. It is our philosophy that these patients are not partially blind, they are partially sighted and the purpose of this project is to develop and exploit to the fullest whatever vision exists.

640 S. Kingshighway Blvd.

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Aminoaciduria

Its Pathologic Significance

Paper chromatography was first introduced about 15 years ago by Consden in England. The technic which has greatly facilitated the study of small organic molecules in biological fluids is now used in the clinical laboratories of many medical centers.

Amino acid excretion has been studied in a variety of diseases and studies have proven to be particularly useful in the detection of genetically determined disorders of metabolism and renal tubular defects.

The growing importance in clinical pathology of paper chromatography is pointed out and methods and technics are presented. Abnormal amino acid excretion, renal tubular defects and overflow aminoacidurias are discussed.

The authors are from the Departments of Pathology, St. Louis University School of Medicine and the Cardinal Glennon Memorial Hospital for Children.

The separation of amino acids by paper chromatography is not difficult but careful attention to detail is essential. The equipment required is simple and inexpensive and any biological fluid may be analyzed. The amino acid content of the urine often reflects the metabolic activities of the body, so it is with this fluid that the method has found its greatest vogue.

Many variations in technics are available (Block, Durrum and Zweig 1958, Smith 1958). The following is a description of the method for preparing a two dimensional descending chromatogram.

Method

A drop of the solution to be studied is placed on one corner of the paper (fig. 1). The upper end of the paper is folded and placed in the solvent trough. The solvents which are composed of an aqueous and an organic phase flow down the paper. The amino acids are partitioned between the flowing organic phase and the stable aqueous phase. The distance a particular amino acid moves is referred to as its Rf value. This value is constant for an amino acid in a particular solvent system and is defined as the distance the amino acid has moved from the point of application divided by the distance the solvent front has travelled from that point.

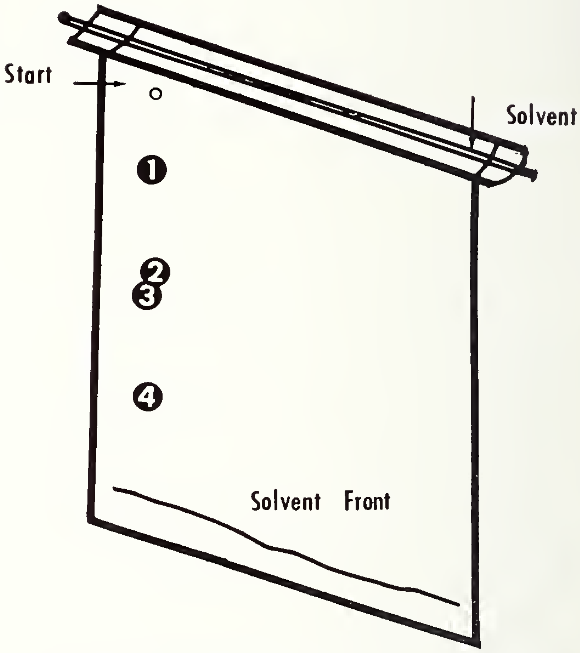

Fig. 1. Paper chromatography: First dimension.

The amino acids illustrated by numbers 2 and 3 (fig. 1), have the same Rf value, and are superimposed. Separation of these amino acids is achieved by turning the paper through 90 degrees and allowing a second solvent to flow perpendicular to the first (fig. 2). The Rf values of the amino acids are different in this solvent so that the substances are separated. When the solvent front has reached the edge of the paper, the chromatogram is dried and stained with an alchoholic solution of ninhydrin (triketohydrindene hydrate).

The amino acids appear as spots colored various shades of red, blue and purple. The diameter and intensity of staining is proportional to the amount of the amino acid so that rough quantitation is possible.

Normal Variations in Amino Acid Excretion

The total excretion of amino acids may be determined by measuring the alpha amino nitrogen content of the urine. The healthy individual excretes about 2 milligrams per kilogram of body weight per day.

The amino acids found in normal urine are listed in order of concentration in figure 3. They represent about 90 per cent of the total alpha amino nitrogen. Minute quantities of at least 12 other amino acids comprise the balance (Soupart, 1959).

Paper chromatography of urine from a normal person usually shows the amino acids glycine, serine, taurine, glutamine, alanine and histidine. Glycine is ordinarily the largest and most deeply staining spot, but taurine or alanine may be equally prominent (fig. 4).

Newborn infants for about the first week of life, and premature infants for the first several weeks of life, excrete three or four times as much alpha amino nitrogen as older children and adults. In addition to the loss of relatively large amounts of the amino acids commonly seen in adults there is a significant excretion of a few specific amino acids (Snyderman 1958). Taurine, one of the end products of the metabolism of the sulfur containing amino acids, is excreted in large amounts. The reason for this is not known. Human milk contains a higher concentration of taurine than cow's milk and breast-fed infants excrete large amounts of this amino acid.

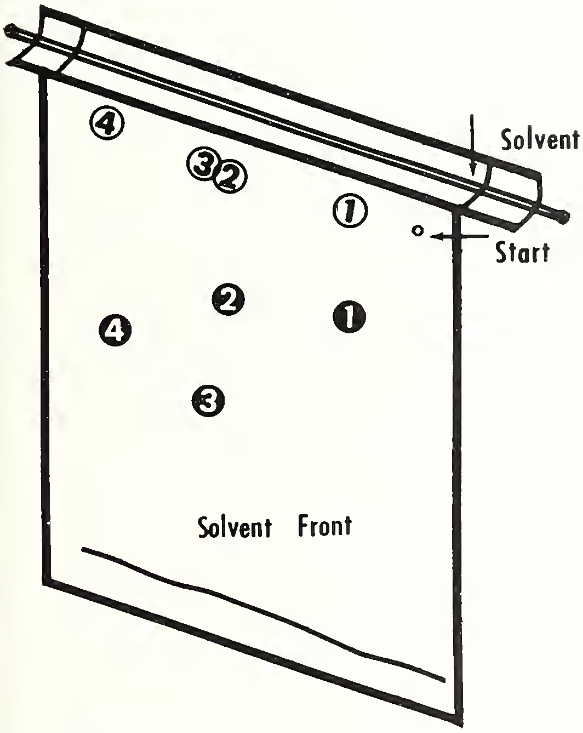

Fig. 2. Paper chromatography: Second dimension.

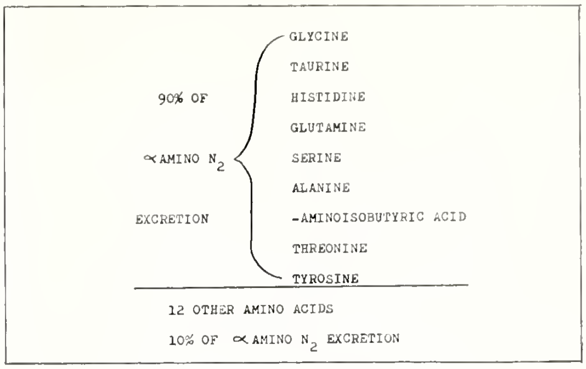

Fig. 3. Free amino acids excreted in normal urine.

Proline and hydroxyproline, which are present in large concentrations in connective tissue, are not normally excreted. Their presence in the urine of newborn infants may be a reflection of immature renal and liver function.

Diet has little effect on the urinary excretion of amino acids. Meals rich in red meat result, however, in the excretion of large amounts of histidine and methylhistidine.

Specific variations of amino acid excretion may be found in some normal individuals. About 5 per cent of Anglosaxon families show beta aminoisobutyric acid as the dominant amino acid in the urine (Crumpler, Dent, Harris and Westall 1951). This trait, which appears to be transmitted as an autosomal recessive character, has also been found in a large percentage of Athabascan Indians, the Eskimos of Alaska, and the Indians of Southwestern United States. These findings have been offered as evidence of the southward migration of the Athabascan tribes (Allison, Blumberg and Gartler 1959).

Abnormal Amino Acid Excretion

1. *Inborn Errors of Metabolism.*—The analysis of urinary amino acids by paper chromatography has made its most significant contribution in the study of the inborn errors of metabolism (Thompson and King 1957). One of the most common of these maladies is phenylketonuria which is said to account for 1 per cent of all mental defectives in institutions. Blood phenylalanine levels are elevated and chromatography

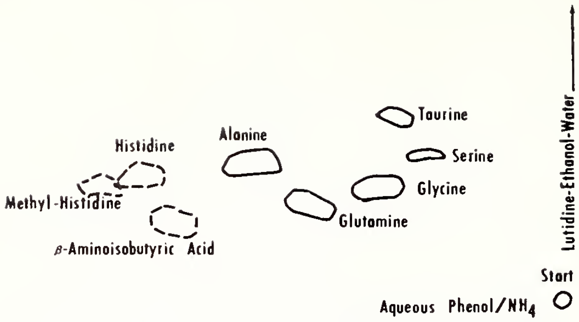

Fig. 4. Paper chromatogram of normal urine.

of plasma or urine will detect increased amounts of this amino acid. Phenylpyruvic acid, which also appears in the urine, may be recognized by the green color which results when a few drops of ferric chloride are added to a filter paper or diaper soaked in the urine. Early detection of children with phenylketonuria is important since elimination of phenylalanine from the diet may prevent or arrest the damage to the brain (Hsia 1959).

The biochemical investigation of children with central nervous system disease is a promising and exciting area of pediatric research which has recently led to the discovery of two other disorders of amino acid metabolism. One of these is maple sugar urine disease, a rare familial disorder characterized by the excretion of urine with the odor of maple sugar. Increased levels of the branched chain amino acids, valine, leucine and isoleucine, are found in the urine and recent studies suggest a defect in the degradation of leucine to acetoacetic acid. A polymer of alpha-hydroxybutyric acid gives the urine the odor of maple sugar (Menkes, Hurst and Craig, Menkes 1959).

H disease or Hartnup disease is another rare familial disease with central nervous system symptoms and massive aminoaciduria. It is thought to be due to a block in the intermediary metabolism of tryptophane (Baron, Dent, Harris and Craig 1954, Menkes 1959).

2. *Renal Tubular Defects.*—Several genetically determined renal tubular defects are accompanied by abnormal urinary amino acid excretion. In some of these, such as cystinuria, the urinary chromatogram is diagnostic (Dent, Heathcote and Joron 1955). In others the aminoaciduria is generalized and nonspecific. Cystinuria was recognized long before the use of chromatography because of the high incidence of renal calculi. The condition, wrongly interpreted as an inborn error of cystine metabolism, is now known to result from a defect of the proximal renal tubule whereby the amino acids ornithine, arginine, lysine and cystine are not reabsorbed.

Genetically determined defects of the renal tubule may involve one or several of the tubular functions. Aminoaciduria is common in these conditions and may be associated with renal glycosuria. Most of the entities are benign although a coincident failure of tubular reabsorption of electrolytes may be of serious consequence. One such condition is the syndrome of Detoni, Fanconi and Debré. This condition, usually encountered in infants and young children, is characterized by a retardation of growth and development associated with rickets, acidosis, polyuria, renal glycosuria, hypophosphatemia, marked generalized aminoaciduria and electrolyte disturbances with hypokalemia. The administration of vitamin D is ineffective although massive dosage may result in the resolution of the bone lesions. Cure of the rickets may be accompanied by cessation of the aminoaciduria suggesting that the tubular mechanisms for handling amino acids may be related in some way to the ability to reabsorb phosphate.

In both Wilson's disease and Galactosemia, the aminoaciduria is probably renal in origin. The primary lesion in Wilson's disease is thought to be a defect in copper metabolism with failure to form adequate amounts of the copper-containing protein, ceruloplasmin. The aminoaciduria, at one time thought to be a result of the hepatic damage, is an inconstant finding. Generalized aminoaciduria may also be found in healthy siblings of persons with Wilson's disease (Smith 1958).

The aminoaciduria of Galactosemia is probably related to the accumulation of galactose-l-phosphate. In the liver this results in the impairment of protein synthesis, and in the kidney it is associated with a tubular defect.

3. *Overflow Aminoacidurias.*—Aminoacidurias resulting from increased levels of amino acids in the plasma may be distinguished from those due to renal tubular defects by the determination of the alpha amino nitrogen level of the plasma. Many systemic and metabolic disorders are accompanied by an increase in plasma amino acids. In most instances, the aminoaciduria is nonspecific. The urine contains increased amounts of the amino acids normally excreted as well as some which are normally present in the plasma in too small a concentration to be excreted in the urine. Certain of the amino acids may be related to the disease process. In severe burns, for instance, large quantities of proline

and hydroxyproline derived from the damaged connective tissue are present.

Breakdown of nucleic acids during starvation and in hematologic disorders such as leukemia and pernicious anemia results in the excretion of large amounts of beta-aminoisobutyric acid. The amino acid chromatogram in leukemia is otherwise normal.

Primary disorders of skeletal muscle may show an excessive aminoaciduria. Taurine is usually the dominant urinary amino acid in these conditions. Large amounts of taurine are excreted in acute recurrent myohemoglobinuria (Bowden, Fraser, Jackson and Walker, 1956) and we have recently demonstrated that taurinuria may occur in acute polymyositis, progressive muscular dystrophy and in experimentally induced muscle necrosis of rats.

The liver is the most important organ in the body with respect to the metabolism of amino acids. Liver damage must be fairly extensive and specifically involve parenchymal cells before excessive aminoaciduria occurs. In severe hepatic necrosis or hepatic coma as many as 30 different amino acids may be excreted. On the other hand, the amino acid chromatogram during the course of mild hepatitis or obstructive liver disease may be normal (Walsh 1953, Hsia and Gellis 1954).

CONCLUSION

The technic of paper chromatography has, within the last few years, assumed a place of some importance in clinical pathology. In particular, the identification of amino acids in the urine has proven to be an extremely useful adjunct to the investigation of certain genetic and metabolic disorders of childhood. Obviously the method should be utilized with discrimination; it is not merely a screening test for the inborn errors of metabolism. With intelligent use and careful interpretation, however, the study of amino acid excretion by paper chromatography provides fascinating glimpses into the metabolism of proteins. The technics described in this paper are qualitative. For most purposes the separation and rough quantitation obtained with two dimensional paper chromatography are adequate. The use of quantitative methods for specific amino acids in the urine is necessary, however, in order to appreciate the full potential of this method of investigation.

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A Rapid Sorting Punch Card for Surgeons

The scientific surgeon must examine his own experiences periodically and compare results with the experiences of others. He can, in this way, make conclusions and contribute to progress in surgery.

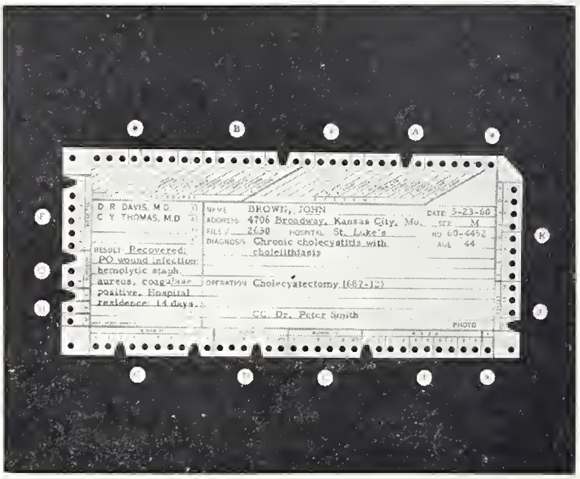
There are many methods available to the surgeon for cataloging surgical procedures for future study and analysis. To have no separate system of filing for case sorting leads to a near-hopeless task when an analysis of cases is desirable. For example, to search through the entire case record files of an active surgeon who has practiced for 20 years in pursuit of all gastric resections performed in a 10-year period would be tantamount to scaling Mt. Everest and probably kill the endeavor in its infancy. The maintenance of a simple card file for surgical procedures is hardly any better as it fails to obviate the necessity for handling the entire volume to secure a few case records. Furthermore, it is duplication of effort. Electronic sorting machines, medical librarians, special personnel and tabulating equipment as maintained by large institutions and clinics are obviously beyond the scope of the surgeon in private practice. It follows, therefore, the surgeon in private practice is frequently at handicap in drawing conclusions from his own experiences because of the relative inaccessibility of his material. We believe the punch card system of rapid case sorting will be of particular interest to surgeons in private or group practice.

A method of cataloging surgical cases by a card index is presented.

Drs. Davis and Thomas are in the Department of Surgery of St. Luke's Hospital, Kansas City.

The Standard Nomenclature of Operations lists a code number corresponding to each operative procedure and lends itself perfectly to punch card filing for rapid sorting. In the interest of order and rapid access to our experiences for study, we designed a punch card for key sorting (fig. 1), with the aid of Royal McBee Corporation, and have found it extremely satisfactory. Multiple, concomitant operations may be punched on a single card, i.e., cholecystectomy and choledochotomy, gastric resection and appendectomy, and so on. The card bears 114 punch holes, 41 of which have been used for coding operations. The remaining 73 holes, or combinations of these, can be used for coding other data desirable for ready reference. Obviously, cards can be designed to suit the individual surgeon's requirements. The three corner holes are used to rearrange cards which may have been filed upside down or backwards, the trimmed corner functioning for identification with this maneuver.

Code numbers in the Standard Nomenclature of Operations consist of two groups of numbers connected by a hyphen. The first number of the group on the left and to the right of the hyphen are designated 1st and 2nd major numbers respectively and, as all numbers in the coding, each has a specific meaning. The remaining numbers on each side of the hyphen are, in order, 1st, 2nd and 3rd minor numbers. Numbers to the left of the hyphen locate the operation in terms of anatomy, those to the right of the hyphen indicate what operation was done. For example,



D R DAVIS, M D
C Y THOMAS, M.D

RESULT Recovered; PO wound infection: hemolytic staph. aureus, coagulase positive. Hospital residence: 14 days.

NAME BROWN, JOHN
DATE 3-23-60
ADDRESS 4706 Broadway, Kansas City, Mo.
SEX M
FILE # 2650 HOSPITAL St. Luke's
NO 60-4452
DIAGNOSIS Chronic cholecystitis with cholelithiasis
AGE 44
OPERATION Cholecystectomy (687-12)
CC. Dr. Peter Smith
PHOTO

Fig. 1

the code number for cholecystectomy is 687-12. Number 6 (1st major) denotes an operation on the digestive system; number 8 (1st minor) locates the operation in the biliary tract and number 7 (2nd minor) designates an operation on the gallbladder. To the right of the hyphen is number 1 (2nd major) indicating excision; number 2 (1st minor) is the number assigned to complete or total excision of an organ. Hence, the code number 687-12 can mean nothing but cholecystectomy and key sorting these numbers from a stack of punched cards will yield only cholecystectomies.

We elected to position the 1st and 2nd major numbers at the top of the card to avoid confusion with punching (fig. 1, A and B). First, 2nd and 3rd minor numbers are punched, in order, into appropriate spaces at the bottom of the card (fig. 1, C, D and E). The hole marked "SF" denotes a single figure; 7 and 2 for 9, 4 and 1 for 5, etc.

In addition to coding of operations, we have included other pertinent data for sorting. Operations can be sorted with reference to who performed the operation and the hospital in which it was done (fig. 1, F and G). Holes marked "M," "P" and "C" indicate malignancy, operative photograph, and complications respectively. The facility for sorting malignant disease is of especial value for periodic follow-up care of patients operated on for this disorder. Operations can be sorted by the decade, year or by any group of years desired by the analyst (fig. 1, I and J). We allocate eight holes (99 possibilities) for future data worthy of sorting and, as the occasion arises, simply assign to each a number (fig. 1, K). In addition, there are 15 unassigned holes which are available for use (fig. 1 *).

Certain features have been incorporated to minimize secretarial requirements and avoid duplication of work. Attached by the left edge to the front of the punch card are two, nonperforated flimsies for tear-out, printed in red, carboned and gummed on their backs, and identical to the punch card in every detail. All three pieces have been printed with spacing in tune with an electric typewriter and are accepted by the machine as a unit. The original, a flimsie, is moistened and attached to the patient's permanent case record. The first carbon, also a flimsie, is sent to the referring physician and may be similarly affixed to his record of the patient. The second carbon is the punch card, printed in black on heavy stock. It is punched by the surgeon or his secretary and filed in random order.

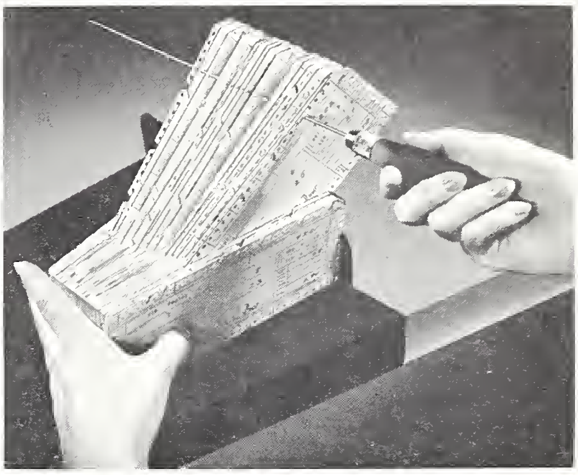


Fig. 2

Key sorting (fig. 2) is rapid and easy to do. When sorting only a single punched hole, 60,000 cards can be sorted for specific data in one hour. By sorting six punched holes, the maximum used in coding operations, 10,000 cards can be handled per hour, or 1,000 cards every six minutes. Obviously, with such a system of coding and rapid access, the busy surgeon will find it easy and pleasant to review his experiences.

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Medicine's Positive "Image"

A Special Article

Editor's Note: During the 1960 Annual Session of the Missouri State Medical Association, a resolution calling for an expanded public relations program that would emphasize organized medicine's positive public services programs was introduced by the 8th Councilor District and subsequently adopted by the House of Delegates. This is a special report to Missouri State Medical Association members outlining progress to date in the accomplishment of this important statewide program.

Proponents of socialized medicine often base their appeals for public support on a statement to the effect that "people of limited means are being deprived of needed medical services because of their inability to pay."

Perhaps there are some instances of people going without medical care—particularly those who, because of pride or lack of information regarding available services, fail to ask for necessary care. But the vast majority of indigent and near-indigent patients can and do receive medical care from their family physicians and other sources of care, if they request it. More often than not, however, medical ethics and doctor patient considerations prevent information on the care that is given from reaching the public.

Nevertheless, unless private medicine gains more recognition for its positive programs of public service, the advocates of federal medicine will go largely unchallenged by the public when they make charges of deficiencies against the private system of medical practice.

It was considerations like these that led to the adoption of a resolution by the MSMA House of Delegates last March instructing the Council to initiate a broad public service program.

That same month—March of 1960—the Council appointed a seven-man special Committee on Public Service to begin work on implementing this resolution.

The Committee, working closely with various other MSMA groups, the staff and public relations counsel, has since registered substantial progress in carrying forward its public service function. Bold new programs designed to assist the state and local societies have been developed, and an increased volume of public information has been generated on the profession's positive action programs.

Long-Range Objectives

Implicit in the Association's expanded public service program are these four broad objectives:

- To increase public awareness of the work of existing state and local committees which exemplifies organized medicine's active role in promoting better health care for all Missouri citizens.
- To provide assurances to the public that necessary medical care is available to all, regardless of income, and that a physician's services are available in medical emergencies.
- To emphasize the profession's efforts in assuring adequate numbers and distribution of qualified physicians throughout the state.
- To inform the public of private medicine's programs aimed at assuring adequate care for the indigent and aging.

From the start, the Committee on Public Service recognize that implementing a program of this scope would require the active interest and cooperation of county medical societies.

Consequently, the Committee requested component society assistance in three letters mailed to the 52 local societies in the state.

Letter number one, mailed April 25, asked that a local Committee on Public Service be appointed and the chairman's name forwarded to the state Committee. To date, 25 local chairmen have been appointed.

Letter number two, mailed June 24, requested information regarding society support of medical education—other than AMEF—and any local programs to aid in the recruitment of paramedical personnel. Thus far, 25 societies have responded.

Letter number three, mailed July 11, requested data on local indigent care facilities or programs. Answers from 18 societies have been received to date.

When information from the responses to these letters has been compiled, the Committee plans to conduct a series of informational meetings for county society Public Service chairmen. Purpose of these meetings will be to discuss "model" public service programs now operating in some

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Research in the Service of Medicine

Missouri societies which might be adaptable to similar conditions in other communities as well. Excellent programs for indigent care, for example, are operating in Greene, Pettis and St. Louis Counties.

Four Target Projects

When the Committee on Public Service met for the first time last spring, it was apparent that certain existing state association projects—such as the Preceptorship Program, the annual AMEF drive, awards to honor medical students—already well publicized, reflected some of the positive efforts of the profession. Additional emphasis has been given to publicity on these programs during the last several months with excellent coverage by the press.

In other public service areas, however, the Committee felt that specific new programs should be developed.

Thus, a list of four preliminary targets—or public service projects—was devised as a means of helping to implement the Association's long-term objectives.

Heading this list was the creation of an Association-sponsored *Medical Student Loan Fund* —a practical method of helping to increase the number and distribution of physicians in the state.

Other immediate goals were: Development of a guide kit for *Emergency Call Systems* for distribution to interested local societies . . . development of a similar kit pertaining to formal *Guarantee of Service* plans which might be useful in setting up or publicizing local programs of this type . . . and, fourth, compilation and publication of a statewide *Directory of Health Resources*. The latter would be designed for use of the individual physician in obtaining specialized care for patients—especially those who are aged or indigent.

Progress Reported

Three of these useful and concrete projects have since been developed or placed in operation.

On August 5, the new MSMA Medical Student Loan Fund, a permanent revolving student aid program, was officially launched with an initial appropriation of $25,000. Announcement of the loan fund received a great deal of favorable publicity throughout the state.

To date, a total of 25 applications for loans have been received from medical students. Of this number, eight have been processed and approved, representing total loans granted of $6,150. Including the pending applications, total loans requested exceed $20,000.

In addition to this positive program, the Committee has prepared two comprehensive informational packets for use of interested county societies in establishing or publicizing formal Emergency Call Systems and Guarantee of Service Plans.

The kits have recently been sent to 28 of the state's larger component societies and are available to others who may want to consider such programs.

The fourth project—publication of a unique Directory of Health Resources—is also well underway.

Auxiliary Agrees to Help

As an important service to physicians and the public, the Woman's Auxiliary to the State Medical Association has agreed to compile the tremendous amount of essential data which will go into the printed directory as one of their major projects.

As visualized at the present time, the completed directory will contain patient-referral information needed by the doctor in securing specialized care or treatment for his patients. Planned as a definitive volume, it is anticipated that the directory will contain practically every medically-oriented source of care in the state—privately-operated, fraternal and charitable, as well as tax-supported agencies.

This massive project, expected to require many months for completion, will serve as an effective means of assuring adequate care to all Missourians, regardless of income.

In essence, then, these are the steps currently being taken, or in prospect, to implement the public service program resolution adopted by the House of Delegates last March. Continued emphasis on the positive programs of private medicine will, it is felt, serve to enhance the confidence of the public, to the detriment of those who advocate welfare-state medicine.

The committee consists of Drs. R. O. Muether, Chairman, Donald M. Dowell, Leonard T. Furlow, Kenneth C. Hollweg, Charles R. Doyle, J. H. Summers and W. W. Tillman.

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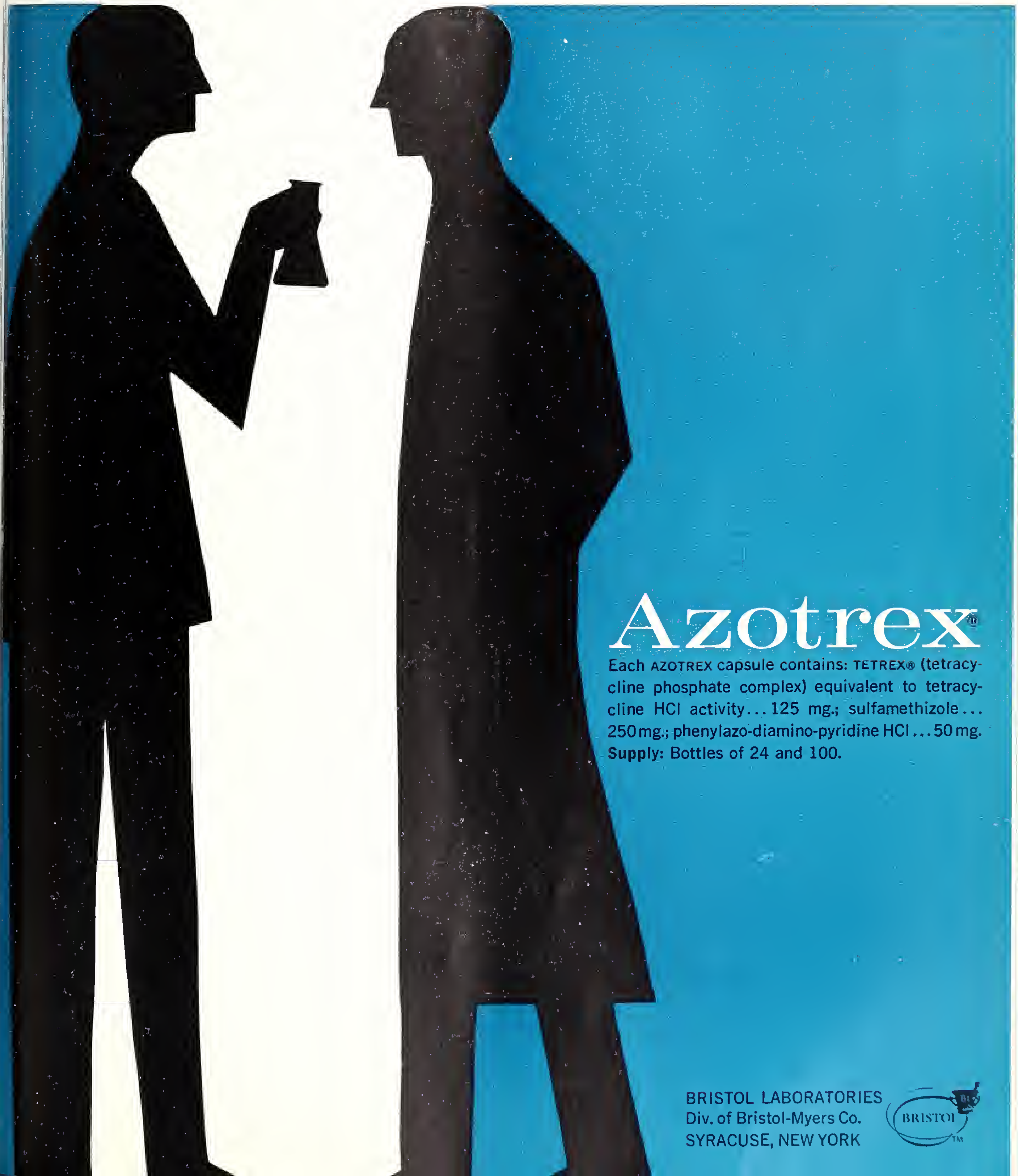

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R. O. Muether, M.D.

President's Message

Why is it that so many well-intentioned people—when urging us to go to the polls on November 8—insist on using the phrase: "it's your *duty* as a citizen"?

Voting is not a duty, it's a privilege.

With his vote, every American has an opportunity of stating his preference as to who should represent him in all levels of government. Ignoring this privilege is ignoring a fundamental precept of self-determination and self-government.

Even so, more than 38,000,000 of our fellow Americans failed to vote in the 1956 elections—roughly two out of every five voters.

Why does this happen? Why do only 60 per cent of our citizens vote—as compared, for example, with a 94 per cent turnout in Italy, or 89 per cent in France?

Obviously a tremendous number of Americans simply fail to recognize that their vote is important; that it gives them the power to help determine such down-to-earth, practical matters as the type of community they live in, the amount of state taxes they must pay, the control which the federal government will exert over them in their work, and so on.

Fortunately, most physicians in Missouri have demonstrated that they, as individuals, recognize the need for active participation in public affairs. Some of our medical colleagues, in fact, hold public office or will be candidates in the coming elections. Others in far greater numbers have taken, and are taking, an active part in support of legislation for better health care for the public, on the one hand, and in opposition to legislation that would lower the quality of medicine, on the other.

In a few days, each of us will have an opportunity of going to the polls and expressing our endorsement of those candidates whom we, as individuals, feel are dedicated to the public's—and medicine's—best interests.

I hope that every physician in the state will take the time to study all candidates beforehand and then, on November 8, exercise his privilege as a citizen by voting for the candidate of his choice.

R. O. Muether M.D.

EDITORIAL

APROPOS NOTHING

While "Apropos Nothing" is the heading used in the *Pettis County Medical Society Bulletin* of September 1960, of an article by C. G. Stauffacher, M.D., Sedalia, it is felt that it is "apropos" and is reprinted with consent of the author and the publication.

Lincoln called it "the last best hope of the earth"—this great national phenomenon of American politics by which the people have the final say at the ballot box as to who will control these centers of power where policy decisions are made. And so again in this 1960 election the eyes of the world are focused upon the greatest of all American "spectaculars" in which not only a President and a Vice President but some 34 senators, a whole House of Representatives, and assorted governors, state legislators and others will be chosen by the people. Once again it is our privilege and our responsibility to decide who these leaders will be.

Since the physician is first of all a citizen with the same responsibilities as any other citizen, it is interesting to ponder a moment on how we as doctors appear to others in the field of citizenship and their participation in public offices.

Dr. Edgar Lee Dessen, director of the U. S. Chamber of Commerce told the Pennsylvania Medical Society's 1960 Officers Conference that although "Physicians have done very well in the advancement of medical science, they have not done as well in these subtler areas of necessary human knowledge that deal with community brotherhood." Pointing a critical finger at the profession's inertia in civil affairs, Dr. Dessen said the physician had practiced the "divine healing art on a pink cloud, far off by himself, uninterrupted and unaffected by the microcosmic and the mundane."

At this same meeting, John H. Biddle, news publisher, after sampling the opinion of some 100 news editors and publishers across the country stated, "the doctor is faced with a real dilemma—by his dedication to his profession and by his training, by his rather inflexible time schedule and by the feeling that he owes his very best to his patients, the doctor is inclined 'to shun' and 'shy away' from activities and enterprises in the public interest."

However, in recent years, times have changed and the physician finds that his role in American life has changed. Beset by social and political pressures to regulate and control the practice of medicine, the physician has come down to earth with a thud and finds he must be a citizen as well as a healer.

Doctors should realize the full import of President Eisenhower's words that in a democracy "politics ought to be the part-time profession of every citizen." For when people refuse to exercise their responsibilities as citizens, government or other political groups will assume the responsibility.

In the case of the doctor, his professional life may very well depend upon how seriously he accepts the challenge of citizenship.

AMA CLINICAL MEETING TO BE IN WASHINGTON

The 14th clinical meeting of the American Medical Association in Washington, November 28 to December 1, will offer a well-rounded, stimulating scientific program designed to interest both family physicians and specialists. The symposia, presentations, and discussions will stress the theme, "New Developments in Old Diseases and Old Developments in New Diseases."

Participants will include proponents of both sides where different views exist on the management of a disease or medical condition. For example, should tonsils be removed when mildly involved or only when they are badly diseased?

The patient's side will also be heard on one symposium. Clarence B. Randall, an industrialist and special assistant to President Eisenhower, will talk on coronary disease from the patient's viewpoint. Other participants and their topics on this panel are: A. Carlton Ernstene, Moderator, Cleveland, Ohio; Thomas W. Mattingly, Washington, D. C., "Can Coronary Patients Be Predicted by Clinical or Physiologic Measurements?"; Donald S. Fredrickson, Bethesda, Maryland, "Fat Metabolism as a Background to the Development of Coronary Atherosclerotic Disease"; Victor A. McKusick, Baltimore, Maryland, "Genetic Background of Patients With Coronary Vascular Disease"; Eugene A. Stead, Jr., Durham, North Carolina, "Management of the Dietary and Psychologic Problems of the Patient With Coronary Disease."

"The Problem of Management of Nodules," always perplexing for both the specialist and the family physician, will be discussed by three panels concerned with breast nodules, the solitary pulmonary nodule, and nodules of the neck.

Another panel will discuss "Recent Advances of the Use of Antibiotics and Steroids," and additional symposia will cover areas in obstetries-gynecology, pediatrics, edema, cirrhosis and liver diseases, renal problems, osteoporosis, thyrotoxicosis, eye problems, orthopedic surgery and trauma, clinical nutrition and bronchopulmonic disease.

Outstanding physicians and research scientists from throughout the nation will conduct the scientific program, and the timetable of discussions has been arranged so that physicians may attend the maximum number of sessions and participate in discussions in the particular fields in which they are most interested.

All the scientific sessions will be held at the District of Columbia National Guard Armory. Starting at 9:30 a.m., Monday, November 28, and running until 11:30 a.m., Thursday, December 1, three sections in both morning and afternoon will be held simultaneously in separate rooms at the Armory. One section will be devoted to presentations of formal papers, another to panel discussions, and the third will be a symposium, all of which have question-and-answer periods.

Another important and integral part of the clinical meeting will be the Scientific Exhibit which will contain approximately 125 exhibits in the Armory. Many of these will relate to such specific subjects as cardiovascular conditions, arthritis and rheumatism, and cancer. Others will be grouped into rather broad areas such as neurology and psychiatry, pediatrics, orthopedics, dermatology, drug therapy, surgery, ophthalmology and otolaryngology, obstetrics and gynecology, and laboratory and clinical investigation. Special demonstration exhibits on fractures and problems in delivery will also be included.

Over 100 exhibits will make up the Industrial Exhibition, also in the Armory, where the products, services, and aids provided by industry to physicians and their patients will be on display and staffed by competent and knowledgeable attendants.

Medical motion pictures will be shown at the Armory, as well as closed color television showings originating in Georgetown University Hospital. Six one-hour TV presentations will be devoted to dermatology, pediatrics, emergency treatment of major injuries, newer methods of surgical treatment of peptic ulcer, orthopedics and pathology.

Three scientific breakfasts will be held on both Tuesday and Wednesday at the Statler Hotel with the themes of "To Do or Not to Do" and "Problems of Management" in particular diseases or types of eases.

The entire scientific program of the Clinical meeting appears in the October 22 issue of the *Journal of the American Medical Association.*

NEW MEMBERS

Alfred K. Cheng, M.D., Professional Bldg., Kansas City, has become a member of the Jackson County Medical Society. Dr. Cheng is a native of China, received his preliminary education in Kansas, and his M.D. degree from the University of Kansas School of Medicine in 1958.

Lawrence L. Hyde, M.D., Plaza Parkway Bldg., Kansas City, has become a member of the Jackson County Medical Society. Dr. Hyde is a native of Illinois, received his preliminary education in Nebraska, and his M.D. degree from the University of Nebraska College of Medicine in 1954.

Frederick W. Kratz, M.D., 1927 W. 152 Highway, Liberty, has become a member of the Clay County Medical Society. Dr. Kratz is a native of Pennsylvania, received his preliminary education in Indiana, and his M.D. degree from the University of Maryland in 1924.

Gene A. McFadden, M.D., 114 W. Jefferson, Clinton, has become a member of the Henry County Medical Society. Dr. McFadden is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from the University of Kansas in 1959. He interned at Dee Hospital, Ogden, Utah.

Lawrence L. Perry, Jr., M.D., 2025 Swift, North Kansas City, has become a member of the Clay County Medical Society. Dr. Perry is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from the University of Kansas in 1959.

Charles T. Riley, M.D., 112 W. Main, Richmond, has become a member of the Lafayette-Ray County Medical Society. Dr. Riley is a native of Nebraska, received his preliminary education in Missouri, and his M.D. degree from the University of Missouri in 1957.

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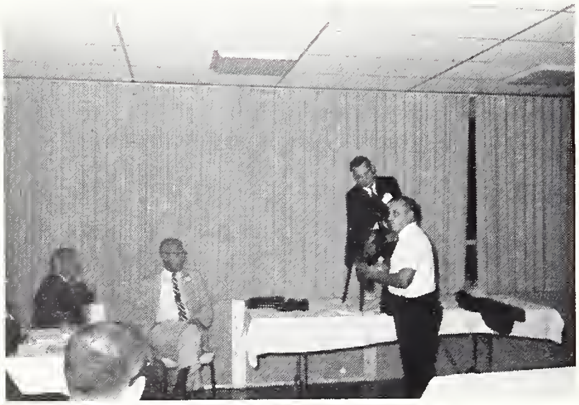
Ramblings of the Field Secretary

Approximately 70 attended the meeting of the West Central Medical Society.

Two interesting, well attended meetings, dealing with "Athletic Injuries," have recently been sponsored by medical societies on the eastern and western borders of the state. St. Louis Medical Society presented a one-day conference on Sunday, August 28, at the Medical Society Auditorium with an attendance of 100 people. The West Central Missouri Medical Society held an evening dinner meeting at the Country Club in Nevada on Thursday, September 8, where the subject of "Athletic Injuries" drew an attendance of 70. The Nevada session was about evenly divided, in attendance, between high school football coaches of that area and physicians.

The evening festivities at the Nevada Country Club began with a social hour at 6:30 p.m. The coaches and doctors were introduced to each other during this period and many interesting conversations "sprung-up" all over the place. Following the socializing hour a delicious buffet dinner was served with all coaches as guests of the West Central Medical Society.



Demonstrations were presented.

The program arranged by the postgraduate committee of the University of Missouri Medical School and the Missouri Academy of General Practice presented discussions on "Long Bones," "Hematuria and Knee Injuries," "The Trainer's Responsibilities" and "The Coach's Responsibilities."

At the close of the session many of the coaches specifically requested that a similar meeting and program of this nature be held again next year. It would seem that the West Central Medical Society has found an annual fall program that has much potential value to its members—both scientific and public relations wise.

Physicians and coaches made up the audience.

Open house was held at the new Kelling Clinic and Hospital at Waverly on Saturday afternoon, September 24. Visitors at the open house were privileged to see what is assumed to be the midwest's first total electric hospital.

Among the hospital features are: overall air-conditioning, 50 ton capacity, through four units; heating by radiant panels thermostatically controlled in each room; microwave ovens and air conditioning in the diet kitchen. The building houses both the clinic and hospital with 32 bed capacity.

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News—Personal and Professional

The medical staff of Deaconess Hospital, St. Louis, has elected **George E. Scheer**, M.D., Richmond Heights, as president, to succeed **Guerdan Hardy**, M.D., St. Louis. Other officers elected were **John J. Roth**, M.D., president-elect; **William L. Macon, Jr.**, M.D., vice president, and **Francis O. Trotter, Jr.**, M.D., secretary-treasurer.

Speaker recently at the Sunday morning breakfast and meeting of the Men's Union Bible class at Harley Park was **Louis Belinson**, M.D., Jefferson City, who spoke on "The Needs of the Mentally Retarded Children of Missouri."

A three year grant totaling $20,435 has been awarded **Carlo P. Caciolo**, M.D., St. Louis, by the National Health Institute of the United States Public Health Service.

The medical staff of St. Joseph Hospital, Kirkwood, recently elected **Waldo Edwards**, M.D., St. Louis, as president. **John C. Martz**, M.D., was elected president-elect, and **James E. Meyer**, M.D., secretary and treasurer.

Appointed a member of a six man advisory committee to assist the City of St. Louis in finding a hospital commissioner and a director of adult health for the city was **Robert B. Bassett**, M.D., St. Louis. The appointment was made by Mayor Raymond R. Tucker.

Among speakers at the 40th annual convention of the County Judges Association of Missouri at Jefferson City on September 15 was **H. M. Hardwicke**, M.D., Jefferson City.

Participating in a conference on artificial heart valves for cardiac surgery held in Chicago early in September was **Hugh E. Stephenson**, Jr., M.D., Columbia.

A member of the 44 delegates from Missouri to the White House Conference on Aging, to be held in Washington, D. C., January 9 to 12, is **Stanley S. Peterson**, M.D., Springfield. The appointments were made by Gov. James T. Blair.

Fellowships for research in radiology have been made by the National Academy of Sciences to **Gwilym S. Lodwick**, M.D., Columbia, and **Theodore E. Keats**, M.D., Columbia. The grants are for continuation studies on the vascular and osseous changes occurring in hypertrophic pulmonary osteoarthropathy.

Newly elected president of the Burge-Protestant Hospital medical staff at Springfield, is **R. C. Conrad**, M.D., Springfield. Dr. Conrad succeeds **Charles Lockhart**, M.D., **Robert D. Duncan**, M.D. was elected president-elect; **Cecil R. Auner**, secretary, and **Lyle D. Litton**, M.D., treasurer. Dr. **E. M. Powell** was named a member at large of the executive committee.

"Oddities in Cancer" was the subject of a talk by **Albert E. Upsher**, M.D., Kansas City, at a meeting of the Joplin Kiwanis Club early in September.

The Boone County Court has appointed **Benedict A. Moranville**, M.D., Columbia, as acting county physician of Boone County.

At the 9th annual conference of the United States Civil Defense Council, held in Minneapolis, September 19 to 23, special awards were presented to **Raymond F. Barnes**, M.D., St. Louis; **Ralph E. Duncan**, M.D., Kansas City, and **Curtis H. Lohr**, M.D., St. Louis.

The Missouri State Diabetes Association, Inc., held a fall meeting on October 22 and 23 at Holiday House, Lake of the Ozarks, and other meetings are scheduled for spring and fall of 1961. The purposes of the organization are to encourage the advancement of knowledge of diabetes and improve its treatment, as well as educate the public. All interested physicians are invited to join the organization.

In order to do surgery and train native doctors and nurses in New Delhi, India, **Harry K. Purcell**, M.D., formerly of St. Louis, has contracted with the Medical Missionary Sisters for a period

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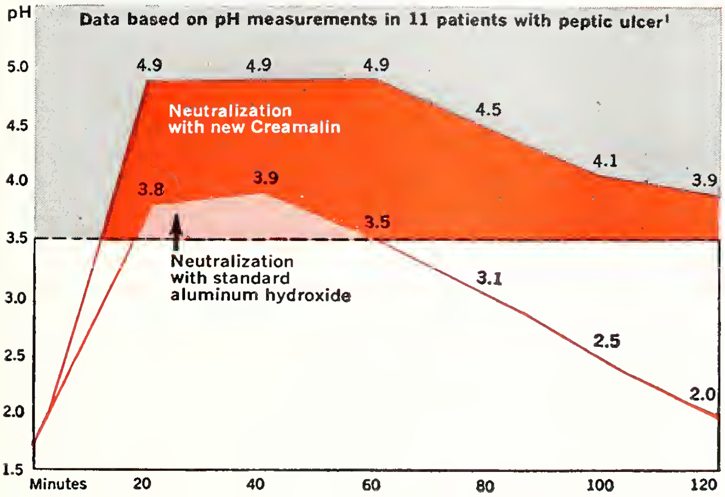

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Dosage: Gastric hyperacidity — from 2 to 4 tablets as necessary. Peptic ulcer or gastritis — from 2 to 4 tablets every two to four hours. Tablets may be chewed, swallowed whole with water or milk, or allowed to dissolve in the mouth. **How supplied:** Bottles of 50, 100, 200 and 1000.

1. Data in the files of the Department of Medical Research, Winthrop Laboratories. 2. Hinkel, E. T., Jr.; Fisher, M. P., and Tainter, M. L.: **J. Am. Pharm. A.** (Scient. Ed.) 48:384, July, 1959.

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of two years. Dr. Purcell and his family left St. Louis in early October.

Appearing in a program on "New Status of Therapy of Certain Eye Conditions" at a joint session of the St. Louis Medical Society and the St. Louis Academy of General Practice were **Philip T. Shahan,** M.D., St. Louis, Moderator, and Drs. **Bennet Y. Alvis, Robert Moses, Lawrence T. Post** and **Robert D. Mattis,** St. Louis. The panel was presented on September 27.

Recently appointed director of school health of the St. Louis schools was **Helen Bruee,** M.D., St. Louis.

Speaker at a meeting of the Carroll County Tuberculosis Association held in Carrollton in September was **John H. Platz,** M.D., Carollton.

The Buchanan County chapter of the March of Dimes has named **H. E. Petersen,** M.D., St. Joseph, as its chairman.

At a meeting of the Randolph County Health Council held in Moberly in September **C. W. Meinershagen,** M.D., Jefferson City, was the speaker.

The medical staff of the Memorial Hospital of Harrisonville recently elected **Jackson C. Moody,** M.D., Harrisonville, as president of the staff.

ST. LOUIS SURGICAL SOCIETY TO PRESENT PANEL

The St. Louis Surgical Society will present a panel discussion on "Pediatric Surgery," November 15, 1960, 5:30 p.m., at the St. Louis Medical Auditorium.

The participants are: Orvar Swenson, M.D., Moderator, Surgeon-in-Chief, Children's Memorial Hospital, Chicago, Professor of Surgery, Northwestern University; Thomas H. Burford, M.D., Professor of Thoracic Surgery, Washington University School of Medicine; C. Rollins Hanlon, M.D., Professor of Surgery and Head of the Department, St. Louis University School of Medicine; J. Eugene Lewis, Jr., M.D., Associate Professor of Clinical Surgery, St. Louis University School of Medicine.

All members of the profession are cordially invited.

DEATHS

Montgomery, J. S., M.D., Milan, a graduate of Rush Medical College, 1903; member of the North Central County Medical Society; aged 84; died August 18.

Hawkins, George W., M.D., Salisbury, a graduate of St. Louis University School of Medicine, 1903; member of the Chariton-Macon-Monroe-Randolph Counties Medical Society; aged 80; died August 27.

Humberd, Charles D., M.D., Barnard, a graduate of the University of Virginia, 1923; member of the Nodaway-Holt-Atchison-Gentry-Worth Counties Medical Society; aged 63; died August 27.

Morrow, Raymond L., M.D., Kansas City, a graduate of Kansas University, 1939; a member of the Jackson County Medical Society; aged 53; died September 11.

White, William H., M.D., St. Louis, a graduate of Barnes Medical College, 1905; member of St. Louis Medical Society; aged 88; died September 11.

Sassin, Edmond F., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1927; member of St. Louis Medical Society; aged 57; died August 16.

Sinkler, William H., M.D., St. Louis, a graduate of Howard University School of Medicine, 1932; member of St. Louis Medical Society; aged 54; died September 22.

McPheeters, J. W., Jr., M.D., Poplar Bluff, a graduate of the University of Arkansas School of Medicine, 1947; member of the Butler-Ripley-Wayne Counties Medical Society; aged 47; died September 24.

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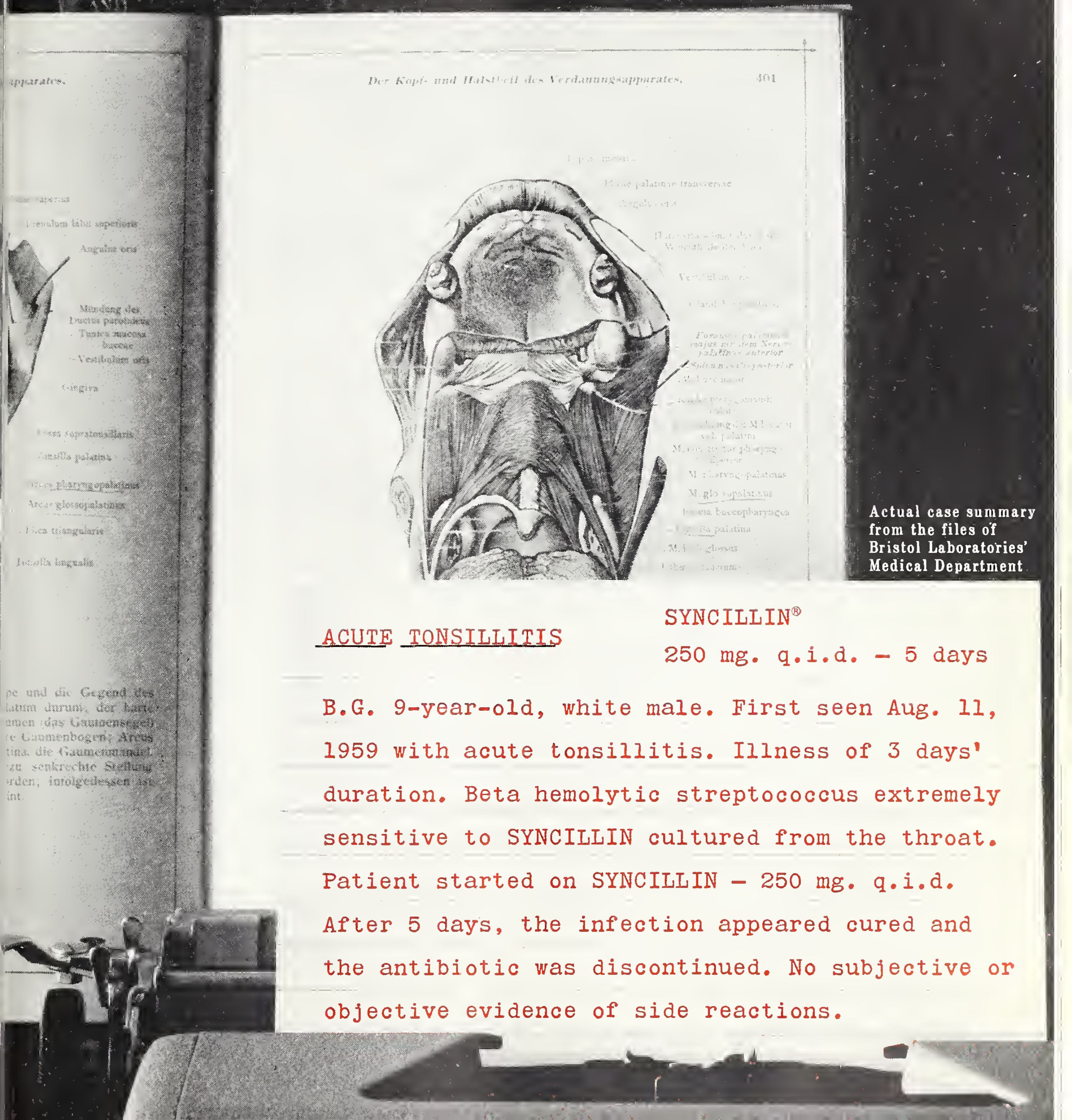
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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Buchanan County Medical Society

Dr. Ian M. Thompson, Chairman, Department of Urology of the University of Missouri Medical Center, was the speaker at the September meeting of the Buchanan County Medical Society, September 7, at Hotel Robidoux, St. Joseph. Thirty-five doctors attended the dinner, business session and program. Dr. Thompson E. Potter, President, presided. The speaker was introduced by Dr. Herbert L. Warres. Dr. Thompson spoke on "Current Research in the Management of Urinary Incontinence."

Dr. Donald M. Dowell, First District Councilor and chairman of the Council of the Missouri State Medical Association, was present and addressed the doctors. He discussed progress toward higher standards in licensure in Missouri and the good work doctors had been doing in making their views known on federal legislation. Dr. Dowell noted that some of the excellent slides shown by the scientific speaker were the work of a senior medical student in the Missouri Medical Center. He announced the recently established $25,000 scholarship fund by the State Association Council and said it was done in the hopes of attracting and retaining medical students of the caliber of the medical artist who made the slides.

William B. Rost, M.D., *Secretary*

Grand River Medical Society

The Grand River Medical Society held its monthly meeting at the Strand Hotel in Chillicothe, on September 8, 1960. There were approximately thirty members and guests present.

Following a smorgasbord dinner, the Ladies' Auxiliary retired to a separate meeting.

John Mayer, M.D., thoracic surgeon, Kansas City, gave an interesting illustrated lecture on "Acute Emergencies of the Chest."

Following Dr. Mayer's presentation, a business meeting was held. Dr. Jack Vinyard of Carrollton was accepted as a new member of the Society.

Other items of business were conducted and the meeting adjourned.

B. D. Howell, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

J. J. WIMP, KIRKSVILLE, COUNCILOR

Chariton-Macon-Monroe-Randolph County Medical Society

A dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society was held at the Woodland Hospital in Moberly on Thursday night, September 8. The scientific program for the evening was given by Mark M. Marks, M.D., of Kansas City, who spoke on "Treatment of Common Rectal Conditions."

Dr. Marks is Chief of the Section of Proctology at General and Menorah Hospitals in Kansas City and attending proctologist at St. Joseph Hospital and Baptist Hospital. He presented some specific common problems relative to anorectal dysfunctions because of the frequency of reoccurrence. The diagnosis and treatment of these conditions were discussed with the aid of colored slides and drawings.

Members present were Drs. Dan Stuart, Brunswick; C. C. Weger, Keytesville; H. S. Miller and Carl Rinkler, Macon; F. A. Barnett, Paris; F. L. Harms, Salisbury; P. V. Dreyer, Huntsville; Josephine Baker, W. D. Chute, C. C. Cohrs, J. W. Fleming, R. M. Hasson, A. P. Rowlette, C. C. Smith, S. R. Szymanski and R. H. Young, Moberly.

Guests present were Dr. Price, Brunswick; Dr. Jim Harms, Salisbury, and Mrs. Marks, wife of the speaker.

Josephine Baker, M.D., *Secretary*

Marion-Ralls-Shelby County Medical Society

A dinner meeting of the Marion-Ralls-Shelby County Medical Society was held at the Moose Lodge in Hannibal, on Tuesday night, September 20. Some 20 physicians were present to hear an extremely practical and interesting program on tuberculosis.

This discussion was presented by Allen Bailey, M.D., and J. L. Yates, M.D., from the medical staff of the State Sanatorium in Mount Vernon. The question and answer period following the formal discussion given by Drs. Bailey and Yates lasted approximately an hour and had to be terminated in order to hold a short business session prior to adjournment.

Wyeth Hamlin, M.D., *Secretary*

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1. Weissberg, G.: Clin. Med., June 1960.

2. Spoor, H. J.: N. Y. St. J. Med., Oct. 15, 1958.

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FOURTH COUNCILOR DISTRICT

PAUL R. WHITENER, ST. LOUIS, COUNCILOR

Lincoln-St. Charles County Medical Society

On Tuesday night, September 27, a dinner meeting of the Lincoln-St. Charles County Medical Society was held at the Golfview Inn at the St. Charles golf course.

Following an enjoyable social hour and dinner, those in attendance were privileged to hear an interesting discussion by Ben L. Neubeiser, M.D., St. Charles, concerning his recent trip to Russia. A business session concluded the evening meeting.

PAUL ROTHER, M.D., *Secretary*

SIXTH COUNCILOR DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

Seventy people including doctors and their wives attended an evening dinner meeting of the Sixth Councilor District of the Missouri State Medical Assocation at the Country Club in Warrensburg on Wednesday night, September 28. A social hour preceded dinner and then the program.

Officers and speakers were seated at the head table.

Following dinner the ladies adjourned to a separate meeting where Mrs. Jordan Kelling, Waverly, President of the Woman's Auxiliary to the State Medical Association, was the featured speaker. The ladies were also privileged to have as their guest Mrs. Frederick E. Wade, Kansas City, President-Elect of the Woman's Auxiliary to the State Medical Association. We are informed that the ladies had a most interesting discussion of various projects that are under consideration by the state Auxiliary. One of these is the development of a "Health Resources" manual or booklet which the State Medical Association has requested the Auxiliary to consider.

The scientific program for the doctors was presented by Warren P. Sights, M.D., neurosurgeon from the University of Missouri Medical School at Columbia. Dr. Sights discussed in an informative and practical manner the subject, "The Early Diagnosis of Brain Lesions." A question and answer period followed his formal talk.

Doctors and wives enjoyed dinner together.

Those physicians present who are members of the Missouri Academy of General Practice are entitled to one hour of Category I Credit from this program toward their Academy requirements.

A good representation from the entire district was present to enjoy this specific occasion. The Johnson County Society, and particularly its officers, Drs. Harkness and Gonzalez, President and Secretary respectively, merit sincere thanks and appreciation for making all the local arrangements for this meeting.

O. B. BARGER, M.D., *Councilor*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Dallas-Hickory-Polk County Medical Society

A dinner meeting of the Dallas-Hickory-Polk County Medical Society was held in Buffalo on Wednesday night, September 7. Though the membership of this society is small, the interest and percentage of attendance of members at each society meeting is unusual.

Six physicians attended the meeting on September 7 which was held in the office of Drs.

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The scientific program for the evening began with the showing of a film entitled "Nephrosis in Children," by Doyle McCraw, M.D., Chairman of the Education Committee of the Missouri Academy of General Practice. Following the film David D. Thomasson, M.D., pediatrician of Springfield, discussed the film and the general subject of nephrosis, expanding certain points shown in the film as well as discussing others which were not. Numerous questions from those present were answered by Dr. Thomasson.

Dr. McCraw operated the projector.

It was the unanimous opinion of the entire group that the showing of good teaching films, with the added value of a discussant, makes for an excellent medical society post-graduate program. Other similar programs of this nature are being planned in the future for this society.

In addition to Dr. Thomasson, Mr. Ray McIntyre, Field Secretary of the State Medical Association, was a guest.

Mary E. P. Griffin, M.D., *Secretary*

Ozarks Medical Society

The Ozarks Medical Society and the doctors' wives held a dinner meeting at the Hereford House in Neosho on Tuesday evening, September 13. There were 41 members and guests present.

Following a short business meeting the entire group was privileged to tour the Rocketdyne plane located in the area. This was a most interesting and informative tour.

A. J. Graves, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

E. A. STRICKER, ST. JAMES, COUNCILOR

Mid-Missouri County Medical Society

A dinner meeting of the Mid-Missouri County Medical Society and the doctors' wives was held at the Munger Moss Cafe in Lebanon on Thursday night, September 29. The evening festivities began with a social hour followed by dinner and then the program.

The scientific program for the evening was presented by medical staff members of the Sanatorium at Mount Vernon and included a discussion of two specific items: "Detection and Early Diagnosis of Tuberculosis," and "Management of Suspected Tubercular Contacts." This interesting program was enjoyed by all and represented a most practical presentation.

All members of the Ninth Councilor District of the State Medical Association were invited by Dr. E. A. Stricker of St. James, Councilor of the District, to attend this meeting and program.

M. K. Underwood, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Mineral Area County Medical Society

Hollis N. Allen, M.D., pathologist of St. Louis, spoke at a meeting of the Mineral Area County Medical Society, Thursday night, September 29, at the State Hospital in Farmington.

Dr. Allen presented in an interesting and informative manner the subject, "Modern Trends in Laboratory Technics and Tests."

George L. Watkins, M.D., *Secretary*

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The Council

The Council met at Hotel Chase, St. Louis, September 24, 25, 1960, with Donald M. Dowell, M.D., Chillicothe, Chairman, presiding. Those present were Drs. Dowell, J. J. Wimp, Kirksville; Leonard T. Furlow, St. Louis; Paul R. Whitener, St. Louis; Byron M. Stuart, Boonville; O. B. Barger, Harrisonville; Kenneth C. Hollweg, Kansas City; W. W. Tillman, Springfield; E. A. Stricker, St. James; Ben M. Bull, Ironton; R. O. Muether, St. Louis; J. H. Summers, Lebanon; John I. Matthews, Jefferson City; Charles R. Doyle, St. Louis; Vernon E. Wilson, Columbia; H. M. Hardwicke, Jefferson City; Joseph M. Krebs, Clayton; Richard Kiene, Kansas City; David E. Musgrave, Excelsior Springs; Glenn W. Hendren, Liberty; W. L. Sportsman, Kansas City; D. Elliott O'Reilly, St. Louis. Messrs. James W. Foristel, Washington, D. C.; Jack Buckner, Springfield; Wm. H. Bartleson, Kansas City; Hollister Smith, Lemoine Skinner, Jordan Singleton, Gene Lunn, Ray McIntyre and T. R. O'Brien, St. Louis.

EXECUTIVE SECRETARY'S REPORT

Mr. O'Brien reported on actions of the House of Delegates of the A.M.A. on two resolutions: (a) Rules of the Joint Commission on Accreditation regarding multiplicity of physician's reporting forms, which was adopted by the House, and (b) A resolution pertaining to Rules of the CAA whereby that organization appoints medical examiners for examination of private airplane pilots, which was defeated in the House of Delegates.

A report was given on the PR Conference held in Chicago, which was attended by Mr. O'Brien and Mr. Singleton, of the staff, and a number of members. Dr. Kendis, of St. Louis County Medical Society, participated in a panel discussion, explaining St. Louis County's new proposed program regarding reduced fees for needy aged patients.

Mr. O'Brien also discussed Governor Blair's Mental Health Conference which he attended along with Dr. Haddock, chairman of our Mental Health Committee. Topics discussed at this Conference were the problems of the State Mental Health Commission, and the 10 Year Mental Health Program. A meeting of our Committee on Mental Health will be held on October 16 to discuss this program and a report will be made to the Council at its next meeting.

Mr. O'Brien presented a resolution received from the A.M.A. regarding the National Foundation which states that local and state medical associations should attempt to have official representatives designated to serve on the board.

A second resolution from the A.M.A. suggested that more doctors take an active part in politics.

A third resolution from A.M.A. urges state and county societies to use material prepared by A.M.A. to encourage high school students to enter medical schools.

He also reported on coming meetings of the A.M.A.—one in November regarding the National Disaster Program and one in early January, the Annual Mental Health Conference, and requested that the chairmen of the respective MSMA committees involved be asked to attend and that their expenses be paid by MSMA. On motion of Dr. Furlow, duly seconded, this request was granted.

Mr. O'Brien also reported on the article contained in the October issue of *Harper's* magazine entitled, "A Crisis in American Medicine," a copy of which was available and passed around. It was decided that copies of the magazine should be purchased, or reprints ordered, so that each Councilor could have a copy.

TREASURER'S REPORT

Dr. Doyle reported on the financial standing of the Association and stated that we were running well within our budget at this time. He also reported on our investment program, and read a letter from our Investment Advisor, the Mercantile Trust Company, recommending that no changes be made in any of our investments at this time. On motion of Dr. Muether, duly seconded, the report was accepted.

PUBLIC SERVICE PROGRAM

Dr. Muether presented the following report on the Public Service Program:

Résumé of Program

This MSMA Public Service program has as its objective a broad and growing public awareness of the positive programs of medicine serving the public. The program specifically seeks to:

(1) Increase public awareness of the profession's promotion of better health care through the work of state and local committees, as, for example, Maternal Welfare, Mental Health, School Health, etc.

(2) Strengthen public realization that physician's services are available to all and available in emergencies.

(3) Emphasize the efforts of the profession to assure adequate numbers and distribution of physicians.

(4) Increase public recognition of the efforts of the profession to assure adequate care for the indigent and the aging.

The program works to accomplish these objectives in two ways—through state and local publicity—and through providing assistance to local medical societies in the development and carrying out of their own programs.

The state program has three principal components—preparation of state and local publicity, assistance in the development of local action programs for indigent care, and assistance to local societies in their public relations programs. A concurrent project is the development of a directory of health resources for the use of the profession in securing needed care for indigent and medically indigent patients.

State and Local Publicity

Included among the positive programs of medicine which deserve increased public recognition are:

(a) Formal guarantee of service programs.

(b) Programs to assure the availability of physicians' services in emergencies.

Emergency call systems.

(c) Efforts to assure adequate numbers and distribution of physicians.

AMEF.

Physicians' individual support of medical schools (Comparison of per capita contributions to medical schools with contributions to other university divisions).

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Distribution of careers information.
Recruitment and aid to paramedical personnel.
Physician placement activities.
Cooperation in the preceptorship program of Missouri University.

(d) Work of state and local committees to promote better health care:

- Rural Medical Service
- Tuberculosis
- Cardiac Disease
- Civil Defense
- Aging
- Diabetes
- Anesthesiology
- Control of Venereal Disease
- Laboratory Medicine
- Physical Medicine and Rehabilitation
- Scientific and Postgraduate Work
- Medical Education & Hospitals
- Cancer
- Mental Health
- Maternal Welfare
- Infant and Child Care
- Health and Public Instruction
- Fractures
- Eye Health
- Industrial Medicine

Local Action Programs for Indigent Care

Local action programs in the field of indigent care are cooperative state-local efforts to identify present resources for the health care of indigent and medically indigent patients, uncover deficiences, if any, provide for the exchange of information between local societies about effective programs that are working elsewhere, and finally, to take positive action to effect improvement in the care of indigent patients where necessary.

Among the elements touching on the care of the indigent and near-indigent are:

- Professional guarantee of service programs
- Emergency call systems
- County hospitals
- County physicians
- County nurses
- County Health Departments
- Out-patient clinics
- Nursing Homes
- Home nursing services
- Home-maker services
- Charitable institutions and others.

Public Relations Assistance to Local Societies

The program contemplates staff public relations assistance to local medical societies when requested. Among the activities for which aid can be furnished are:

- Consultation on program content and operation
- Planning assistance
- Publicity services
- Information and materials exchange
- Systems for reporting newsworthy public relations and action projects
- Organization and operation of speakers bureaus
- Use of motion pictures
- Radio and TV activities
- Press relations committees and society spokesmen
- Press releases
- Advertising
- Distribution of literature and many others.

It is also planned to organize district public relations conferences from time to time, along with medical-press meetings.

Three letters have been written to County Medical Societies:

Letter 1, mailed April 26, advised the County Societies of the resolution adopted by the House of Delegates, requested that a local Committee on Public Service be appointed and that the name of the Chairman be sent to the State office.

To date, the names of Chairmen from 15 societies have been received.

Letter 2, mailed June 24, requested information from County Societies regarding local support of medical schools or medical students, other than AMEF, and also any local efforts to aid in recruitment of paramedical personnel or promotion of science fairs, etc.

Answers have been received from 20 societies.

Letter 3, mailed July 11, requested information on local societies indigent care programs, etc.

Answers have been received from 10 county societies.

FURTHER PLANS

In discussion of further plans of the committee, it was pointed out that some societies now have effective indigent care programs, as Pettis and Greene Counties, and that information about these programs will be made available to comparable societies.

RELEASE

The following news release was presented and approved by the Committee:

"Forty-four Missouri physicians were cited this week by the President of the Missouri State Medical Association for their efforts to help assure future medical care for smaller communities through cooperation with the University of Missouri Medical School Preceptorship program.

"Dr. R. O. Muether, St. Louis, President of the State Medical Organization, in marking the completion of the fourth successful year for the program, said that physicians who have participated have made a substantial contribution to the people of Missouri.

"The physicians cooperating with this program are helping assure that doctors' services will continue to be available in outstate areas in the future," Dr. Muether said. "By demonstrating to medical students the values, satisfactions and opportunities for service that practicing medicine in a smaller community can bring, they provide real encouragement for our new doctors to serve in the smaller towns of the state.

"Under the preceptionship program, senior medical students from the University of Missouri spend six weeks with a practicing physician in one of the state's smaller towns. The student works closely with the physician, seeing patients with him in the office, making home and hospital calls and observing office business procedures. In most cases the student lives in the physician's home and is called to accompany him on night calls and emergencies and generally lives the life of a practitioner in the town. He thus not only receives scientific training in medicine, but has the opportunity to see first-hand the advantages of out-state practice.

"The forty-four physicians to be cited this week by

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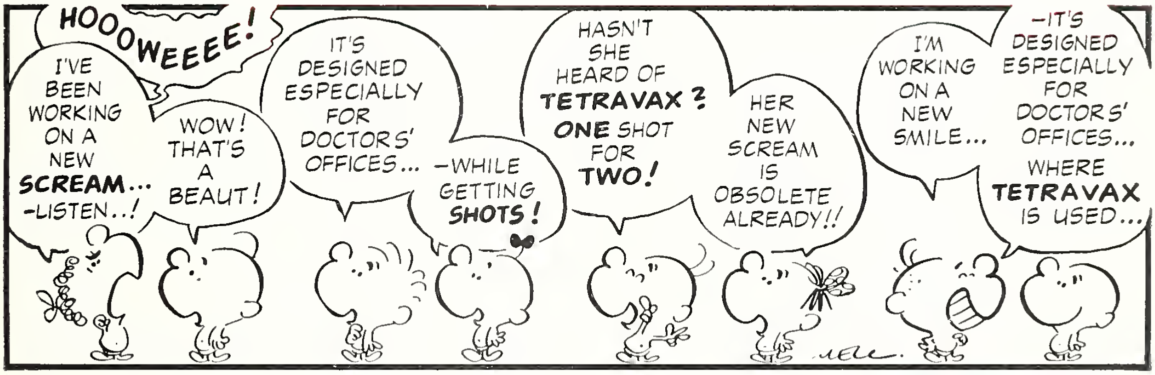
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Dr. Muether for their cooperation with the program were:

"Jack Gunn, Versailles; William Richardson, Union; G. A. Richardson, Union; Robert Best, Higginsville; C. A. Schmidt, Gerald; R. W. Froelich, Lebanon; E. L. Niedermeyer, Tarkio; Robert Ward, Centralia; A. J. Graves, Mount Vernon; C. T. Shaw, Hermann; G. M. Workman, Hermann; Stephen Parks, Bloomfield; B. B. Hurst, Lebanon; T. R. McArtor, Browning; John F. Mabrey, Plattsburg; P. T. Luckenbill, Plattsburg; Robert Smith, Marceline; George Gary, Marceline; Doyle C. McCraw, Bolivar; Kenyon Latham, California; W. A. Broyles, Bethany; Charles Worley, Sweet Springs; Paul Roberts, Sweet Springs; Graham Parker, Platte City; Charles S. Price, Cassville; Kenneth Glover, Mt. Vernon; T. M. McDonnell, Marshfield; C. R. McDonnell, Marshfield; E. A. Stricker, St. James; H. F. Hoelscher, Warrenton; S. O. Schroeder, Liberty; A. G. Karraker, Farmington; Frank Zahrt, Princeton; D. W. Croom, Malden; Jordan A. Kelling, Waverly; Douglas G. Kelling, Waverly; Frank B. Atteson, Grant City; Wallace Carpenter, Rockport; P. V. Siegel, Smithton; J. H. Trolinger, Jackson; A. E. Spelman, Smithville; Wyeth Hamlin, Hannibal; A. J. C. McCallum, Aurora; R. R. Grayson, Columbia."

SERVICE KITS

Outlines of possibilities of "Emergency Call" and "Guarantee of Service" programs were presented to the committee.

STUDENT LOAN FUND

After discussion, the following recommendations concerning the student loan fund were adopted:

1. The Association wants the money to be available to students in the manner which will accomplish the most toward furthering the medical education of the individual and help assure adequate numbers of physicians to serve the public in the future.

2. Understandably, the Association also seeks to make the public aware of this program, as one of the positive programs of medicine for the benefit of the public. It is also desirable that medical students also be aware of and appreciate the program to the end that upon entry into practice they will be influenced to take an active part in the continuance of similar positive programs by the profession.

In connection with the second consideration, information can be given to the public about the plan at the time the funds are announced to the medical schools, and continuing emphasis can be given from time to time on the fact that the Association has made these funds available for the benefit of the medical students and the public. It would seem, however, that no publicity should be given the actual granting of a loan to an individual, although after a period of time, information could be provided on the number of individuals assisted.

At the same time, students at the schools, and potential medical students, should be made aware of the existence of the MSMA funds, and, of course, the individual recipients of loans would be aware of the source.

When details of the program have been agreed upon, a simple folder describing the loan fund, eligibility requirements, repayment provisions, etc., can be prepared. Letters can then go to the deans of all medical schools announcing the program and enclosing a small supply of folders, along with application forms, for distribution to students inquiring about loans.

(Since it is quite possible that, at any particular school, several years may pass without a Missouri resident applying for loan aid, there is some problem in keeping the schools conscious of the MSMA loan fund. To overcome this, a post card might be mailed to the schools shortly before the beginning of each semester, reminding them of the fund and offering to renew the supply of folders and application forms. At the beginning of each school year, a small bulletin board poster could also be supplied.)

Students would apply direct to the MSMA committee on the application forms provided. These would be designed to obtain information about the student, his financial resources, grades, references, etc., upon which the committee can base its decision.

The responsibility for and control of the program would rest with the MSMA committee, which would give final approval for specific loans within the total amount appropriated by the Association, disburse the money, maintain active contact with recipients after graduation and collect the repayments when they become due.

In suggesting possible general provisions for the loans, it was thought that the program should be a liberal one, similar to the following:

1. Loans to be made available to registered full-time students in A.M.A. accredited schools of medicine in the United States who are working toward an M.D. degree, and who have their home residence in Missouri.

2. Money to be loaned for any worthy purpose directly connected with furtherance of the student's medical education, including tuition, fees, books, equipment used in undergraduate education, necessary living expenses while in residence at the school, etc.

3. Provision that any student holding one or more loans from the MSMA fund would continue to be eligible to apply for further loans if the need exists. Maximum total loans would then be controlled on an individual consideration basis by the MSMA committee within the total fund appropriated.

4. Proceeds of the loan to be paid to the student himself for disbursement.

5. Interest would be charged on the loans at the rate of 2 per cent per annum from the date of the loan through one year after the date of beginning practice. While this interest would accrue during this period, it would not be payable, except at the student's option, until the principal of the loan becomes due and payable.

If during this period—up to one year after leaving or graduation from medical school, or after completion of internship, as provided—the student enters active military service, he may secure a continuation of the 2 per cent rate of interest for up to two additional years, upon approval of the student loan committee. It would be expected that such approval would be granted only where there are unusual extenuating circumstances in cases in which the student leaves medical school before graduating.

One year after date of beginning practice, the principal and accrued interest shall become due and payable, with the provision that repayment shall be completed in no more than four additional years from that date, and that no less than one-fifth of the total principal plus accrued interest, shall be due each year. (This gives a period of five years for repayment beginning with the date of completion of training.) The interest rate on the unpaid balance of the principal shall increase per annum by 1 per cent.

The recipient of the loan shall have the privilege of

(Continued on page 1392)

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The efficacy of **PATHIBAMATE** has been confirmed clinically in **duodenal ulcer, gastric ulcer, intestinal colic, spastic and irritable colon, ileitis, esophageal spasm, anxiety neurosis** with gastrointestinal symptoms, and **gastric hypermotility.**

Pictured are the results obtained with the PATHILON (tridihexethyl iodide)–meprobamate combination† in a double-blind study of 303 ulcer patients, extending over a period of 36 months.* They clearly demonstrate the efficacy of **PATHIBAMATE** in controlling the symptoms.

SIDE EFFECTS	TRIDIHEXETHYL IODIDE† MEPROBAMATE	TRIDIHEXETHYL IODIDE†	METHANTHELINE BROMIDE	ATROPINE SULFATE	PLACEBO
DRY MOUTH	1%	5%	72%	46%	5%
STOMATITIS	1%	0%	28%	14%	0%
VISUAL DISTURBANCES	0%	0%	50%	34%	1%
URINARY RETENTION	0%	0%	18%	11%	1%
DROWSINESS	20%	0%	0%	0%	0%
COMPLICATIONS OR SURGERY					
HEMORRHAGE	0%	9%	3%	9%	10%
PERFORATION	0%	0%	0%	6%	0%
OPERATION	0%	5%	5%	14%	2%
RECURRENCES					
NONE	28%	23%	25%	17%	26%
FEWER AND MILDER	67%	62%	52%	37%	24%
SAME OR MORE	5%	15%	23%	46%	50%

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*Atwater, J. S., and Carson, J. M.: Therapeutic Principles in Management of Peptic Ulcer. Am. J. Digest. Dis. 4:1055 (Dec.) 1959.

†PATHILON is now supplied as tridihexethyl chloride instead of the iodide, an advantage permitting wider use, since the latter could distort the results of certain thyroid function tests.

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prepayment of principal and accrued interest in any amount at any time without regard to due date and without penalty.

6. Loans be secured by a legal note in a form to be approved by MSMA. Cosignature of the note would not be required.

7. In the event of death of the student before full repayment of the loan, the estate of the student should be held responsible for repayment. In event of permanent and total disability of the student before repayment, however, the amount of the principal and interest remaining due would be forgiven and the note cancelled.

It was felt that the approximate amount of a loan should be $1,000; that a bank or trust company should handle the account; that a committee of three should pass on the loans; that a foundation should be established which could solicit funds.

It was decided that a foundation should be established and a committee consisting of Drs. Muether, Furlow and Doyle was appointed to carry out the loan program until the foundation could be established and to start proceedings toward setting up the foundation.

PROGRESS TO DATE

A. Dr. Muether reported that the names of 25 Chairmen of county society Public Service Committees have been received.

B. The questionnaires, referred to in the report, dealing with local programs to assist medical students and other paramedical personnel, have been received from 25 county societies.

C. The questionnaires dealing with local indigent care programs have been received from 18 county societies.

D. Kits have been prepared to aid county societies to set up an Emergency Call Service program and it is planned to send these to approximately 30 local societies at an early date.

E. The news release on MSMA participation in the University of Missouri preceptor program was sent on July 29 and got an excellent response over the state.

F. A start has been made to accumulate the information we need for the "Directory of Health Resources." The Woman's Auxiliary has consented to attempt to secure the necessary information for us.

G. Student Loan Fund: Dr. Muether reported that, of the 27 student loan applications received, eight have been processed, all favorably, for a total of $6,150; 19 applications are in process, and that the total loan requests exceed $20,000.

After discussion, in which it was shown that the original appropriation of $25,000 would not be adequate to meet the need, it was proposed that the Budget Committee make a recommendation for an additional appropriation, based on any excess left over from expenditures for the year. On motion of Dr. Muether, duly seconded, this was passed.

It was also suggested that the membership and the County Societies be informed as to what has been done and what is needed for the Student Loan Fund, in the hope of getting some private donations from these sources.

On motion of Dr. Furlow, duly seconded, the Report of the Public Service Committee was accepted.

FIELD SECRETARY'S REPORT

Mr. McIntyre gave a report on the number of doctors locating in Missouri, stating that a good number can be expected from the University of Missouri graduating classes. Since January 1, 1960, four doctors from the class of 1957 and one from the class of 1959, University of Missouri, have located in rural areas of Missouri.

He also reported on new hospitals, new additions to hospitals, and plans for new hospitals in the following areas: new addition to Bothwell Hospital, Sedalia; Carroll County Hospital, about 70 per cent complete; Sullivan, contract has just been let; Stoddard County, Dexter; Cass County is thinking in terms of a new hospital. Bates County Hospital has just been opened, and a new hospital at Sweet Springs opened in August. Madison County, Fredericktown, will open about November 1, and Ripley County, Doniphan, and Cedar County Hospital will be open soon. Others include Smithville, Howard County Hospital and Johnson County Hospital at Warrensburg. Additions have been made in Monett, Hannibal, St. Joseph, Phelps County and Sikeston.

Mr. McIntyre reported on several county society meetings he attended including a fine program on "Athletic Injuries" given at the St. Louis Medical Society on August 28, and another on the same subject at the West Central Medical Society in Nevada on September 8. Representative Curtis spoke to the St. Louis County Medical Society on September 14, and Mr. Leo Brown of the A.M.A. spoke to the Greene County Medical Society on September 23.

Mr. McIntyre reported on the Preceptorship Program, stating that there are eleven preceptees, two to begin on December 30, and the rest later. He also stated that 11 physicians are needed to take preceptees.

LIAISON COMMITTEE WITH OSTEOPATHIC ASSOCIATION

The report of the Committee on Liaison with the Osteopathic Association was submitted by Mr. O'Brien, as follows:

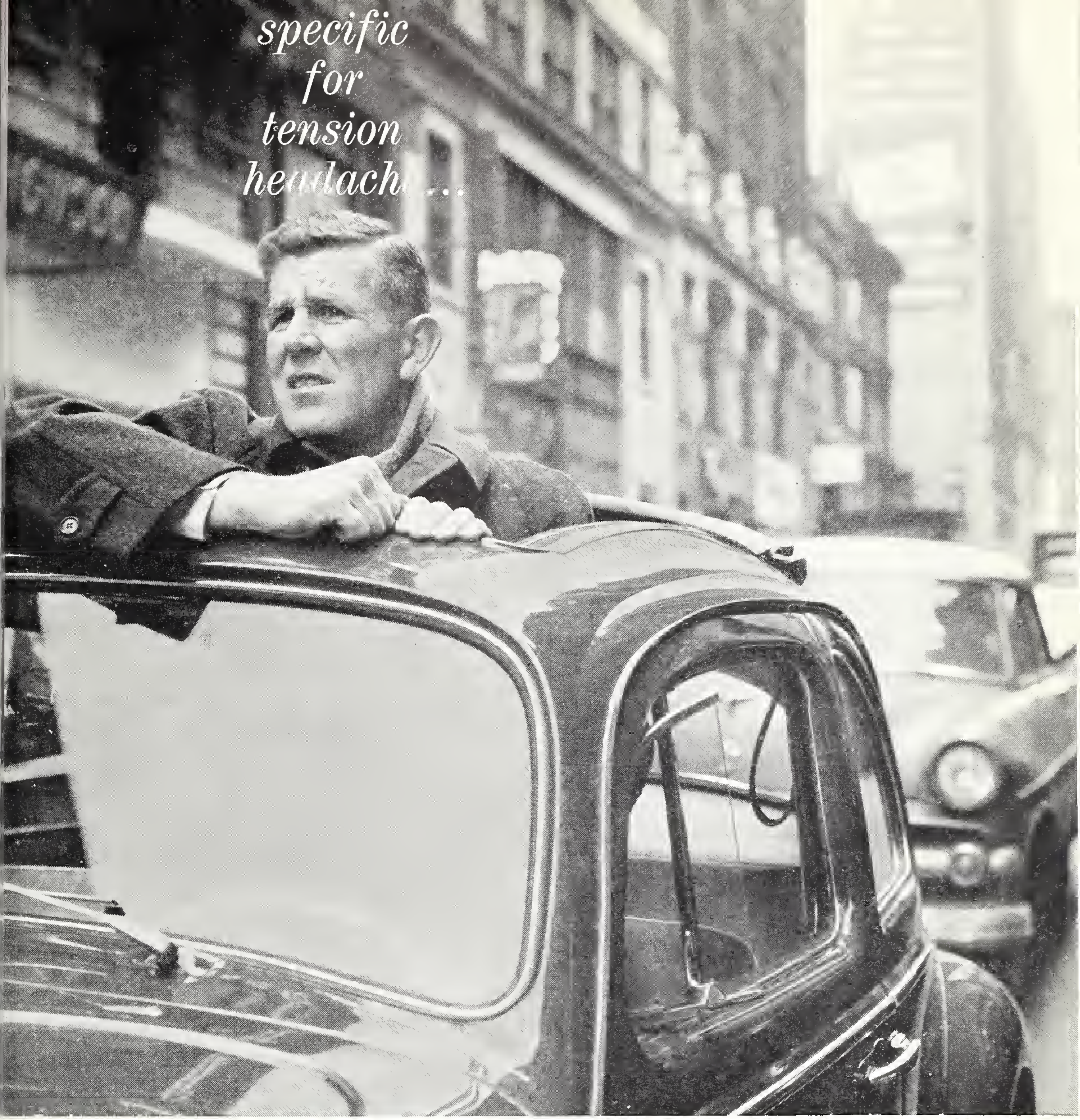
Changes in Joint Licensure

It is recommended that Sec. 22, 1a, of the Final Revision of S.B. No. 50 be taken out of the bill by amendment, if possible, so that it may not be retained in the permanent statutes.

On motion of Dr. Dowell, duly seconded, this was approved. It was agreed that the two executive secretaries should determine the appropriate time to introduce a bill to secure this change. It was pointed out that there may be other changes necessary, one of them being the possibility of an increase in the charge for taking board examinations. The charge at present is $25 and the cost of obtaining the questions and tabulation of results is $25.

Medical-Legal Examiner

It was reported that the House of Delegates of the MSMA passed a resolution at its last meeting calling for efforts to change the coroner system to that of medical-legal examiner. This was discussed, it being pointed out that some states have had this law in effect for many years and that it has a great advantage over the coroner system; that legislation may be difficult because it is an elective office in the 114 counties; and that one bill, introduced in 1955, had not gotten out of committee. It was suggested that the office of medical examiner might be set up either in Jefferson City or at the University of Missouri. Final copies of the proposed bill should be ready in early fall for distribution.



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Friedman, A. P., and Merritt, H. H.: J.A.M.A. *163*:1111 (Mar. 30) 1957.

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Dosage: 1 or 2 every four hours, according to need, up to 6 per day.

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Physical Therapy

It was reported that the physical therapists wished to be licensed in the state as a protection against those practicing who were not qualified. Illustrations were reported. It was stated that in 33 states this group coming under the healing arts act was discussed. Mr. O'Brien said that a copy of the proposed act would be in his hands early in September, at which time it could be studied by the group. No action was taken.

Staff Set-ups

Various problems of staff set-up of tax supported hospitals, as well as others, were discussed as to qualification of staff members and the possibility of some method of passing on such qualifications; the state hospital licensing law and its limitations; the power of the board of trustees of hospitals relative to professional qualifications; the possibility of an advisory committee from the group that might offer help to boards of trustees and to hospitals; the accreditation of hospitals; the greater problem in the small hospital as to qualification of staff members; the possibility of establishing minimal qualifications.

It was decided that in most instances, this was a local problem that could not be settled on the state level and it was agreed that the subject should be explored further at a future meeting.

After discussion, and on motion of Dr. Tillman, duly seconded, it was recommended that an act be prepared for submission to the legislature to increase the fees for examination for licensure from $25 to $40, and that a second act be prepared to eliminate subsection 1a from Section 22 of the Joint Licensure Act.

On motion of Dr. Furlow, duly seconded, the report of the Committee on Liaison with the Osteopathic Association was approved.

MEDICARE

Mr. O'Brien presented a letter received from Colonel Evans regarding the new Medicare Contract which will take effect on October 1, 1960. After discussion, a motion made by Dr. Tillman, duly seconded, to renew the Medicare contract for another year, was passed.

1961 ANNUAL SESSION PROGRAM

Dr. Matthews gave a brief report on the 1961 Annual Session program, stating that it was shaping up nicely. He brought up the subject of the possibility of forming a 50 Year Club for members who have received their 50 Year pins. After discussion, and on motion of Dr. Stuart, duly seconded, it was decided to send a letter to all the 50 Year members asking whether or not they wished to form a 50 Year Club and, if so, if they would attend a luncheon for them at the Annual Session.

STATE DIVISION OF HEALTH—MISSOURI PUBLIC HEALTH PLAN

Dr. Hardwicke discussed the Missouri State Public Health Plan and requested that the Association consider the philosophy of it and, if possible, endorse the budget which must be submitted to the Legislature. Copies of the plan were given to the Councilors and they were asked to mail their comments to the Committee, composed of Drs. Matthews, Stuart and Barger.

SEROLOGY PROGRAM

Dr. Hardwicke furnished information about the use of the State Laboratories by private physicians for serological tests. He stated that some of the County Medical Societies, and many individual physicians, have urged that the Division of Health should return to its former practice of handling all serological tests. He stated that the volume of work had declined approximately 30 per cent. He stated that he hoped that the State Laboratories will be able to provide the following services on request: Phage typing of Coagulase; Positive Hemolytic; Streptococcus Aurian; Rapid identification of Rabies; Rapid identification of Type A Beta Hemolytic Streptococci and Epidemicological surveys.

The information about serological testing and special major laboratory services was referred to the MSMA Committee on Laboratory Medicine.

NURSING HOME NEEDS

Dr. Hardwicke explained a proposed program regarding the development of a larger number of nursing home beds. He explained that there are about 11,000 licensed beds at present and that about 6,000 additional beds are required in our state. The plan contemplates the use of local, state and federal funds through the Hill-Burton program. He was asked to send a memorandum of explanation for the future consideration of the Council.

HEART DISEASE CONTROL

Dr. Hardwicke also discussed the grant for heart disease control from the federal government, stating that part of this money has been used for educational purposes. It has been made available to medical schools in Missouri for postgraduate heart disease educational programs. A request was received from St. Louis University in regard to a Heart Oscultation Course. He asked whether or not the Association wished the Division to continue to provide funds for that purpose. After discussion, it was decided to refer this to the Committee on Study of Cardiac Disease.

A.M.A. DELEGATE

Dr. Kiene presented interesting sidelights on the recent A.M.A. meeting.

DOCTOR'S LIEN LAW

Mr. Noble discussed a legislative act to provide a Doctor's Lien Law which was referred to the Council by the Missouri Academy of General Practice. He furnished a memorandum which outlined a number of questions which need answering before such an act can be drafted. On motion of Dr. Tillman, duly seconded, it was decided to send Mr. Noble's suggestions to the Missouri Academy of General Practice.

Discussion followed on Missouri Academy of General Practice proposed legislation on married persons being declared to be adults, regardless of age, or an act relating to the competence of minors. After discussion, a motion was made by Dr. Bull, duly seconded, that this bill be introduced in the next session of the legislature and that the Missouri Academy of General Practice be so advised. The motion passed.

FEDERAL LEGISLATION

Mr. James W. Foristel of the A.M.A. Washington Office spoke on the final outcome of federal legislation

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organisms

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1,928 published cases in the two years since TAO was released for general use show:

94.3% effectiveness in respiratory infections (617 cases including tonsillitis, staphylococcal and streptococcal pharyngitis, bronchitis, infectious asthma, broncho-pneumonia, lobar pneumonia, bronchiectasis, lung abscess, otitis.) **You can count on TAO.**

92% effectiveness in skin and soft tissue infections (900 cases including pyoderma, impetigo, acne, infected skin disorders, wounds, incisions and burns, furunculosis, abscess, cellulitis, chronic ulcer, adenitis.) **You can count on TAO.**

87.1% effectiveness in genitourinary infections (349 cases including urethritis, cystitis, pyelitis, pyelonephritis, orchitis, pelvic inflammation, acute gonococcal urethritis, lymphogranuloma venereum.) **You can count on TAO.**

75.8% effectiveness in diverse infections (62 cases including fever of undetermined origin, peritoneal abscess, osteitis, periarthritis, septic arthritis, staphylococcal enterocolitis, gastroenteritis, carriers of staphylococci.) **You can count on TAO.**

95.6% of 1,928 cases free of side effects —in the remaining 4.4%, reactions were chiefly mild gastrointestinal disturbances which seldom necessitated discontinuance of therapy.

* In 884 of 1,928 cases the causative organisms were mostly staphylococci. The majority of clinical isolates were found to be resistant to at least one of the commonly used antibiotics and many patients had failed to respond to previous therapy with one or more antibiotics. **TAO proved 93.4% effective in these 884 cases.**

Complete bibliography available on request.

DOSAGE: varies according to severity of infection. Usual adult dose—250 to 500 mg. q.i.d. Usual pediatric dose: 3-5 mg./lb. body weight every 6 hours.

NOTE: In some children, when TAO was administered at considerably higher than therapeutic levels for extended periods, transient-jaundice and other indications of liver dysfunction have been noted. A rapid and complete return to normal occurred when TAO was withdrawn.

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for the health care of the aged. He urged Missouri to take advantage of the new legislation which has two facets: (1) provides federal matching funds for persons already on public assistance rolls over 65 years of age; (2) matching funds will be provided to states for the near needy persons, 65 years or older. The legislation is explained in the following Washington Report:

"The federal government is offering states liberal matching funds to provide health care for needy and near-needy persons 65 years of age and older.

"The program, which Congress approved in the bobtailed postconvention session, is supported by the American Medical Association and allied health groups.

"Congressional approval of the federal-state program marked a victory for the medical profession and a defeat for Democratic Presidential Nominee John F. Kennedy, the AFL-CIO and other advocates of the Social Security approach to the problem.

"In the key vote on the issue, the Senate rejected by a 51-44 vote a Kennedy proposal that would have provided hospitalization and medical care for the aged under the Social Security system. The Kennedy plan would have required an increase in payroll taxes.

"Republicans and Southern Democrats joined in the Senate to defeat the Social Security approach which was opposed vigorously by the medical profession.

"After voting down the Kennedy plan and a separate proposal of the Eisenhower Administration, the Senate passed a modified version of a House approved program. The modifications, sponsored by Sen. Robert S. Kerr (D., Okla.) and others, provided for increases in the percentage of federal matching funds and for administrative changes designed to facilitate state participation.

"Under the legislation as signed into law by President Eisenhower, (1) substantial increases are authorized in federal grants to states to help with health care expenses of the 2.4 million persons on old age assistance rolls, and (2) Federal matching funds are offered the states to finance a new program of health care for an estimated 10 million aged persons who are not on relief but whose incomes may be inadequate to take care of all their health costs.

"Start of the program was authorized for October 1 for those states where new state legislation is not required.

"Administration of the program rests entirely with the states, subject to Federal approval in broad terms. It is up to each individual state whether it participates. Eligibility standards for beneficiaries and what health care services are provided are matters for the states to decide.

"If a state so chooses, it can take care of all the health needs of an eligible beneficiary. The law authorized inpatient hospital services; skilled nursing home services; physicians' services; outpatient or clinic services; home care services; private duty nursing services; physical therapy and related services; dental services; laboratory and x-ray services; prescribed drugs, eye-glasses, dentures and prosthetic devices; diagnostic screening and preventive services, and any other medical care or remedial care recognized under state law.

"For medical expenses of persons on old age assistance rolls, the Federal government will contribute 50 to 80 per cent—with states with low per capita income getting the larger percentages of federal aid—of an amount equal to $12 multiplied by the number of old age assistance recipients in a particular state.

"The matching formula will be the same for financing the health care of the near-needy but there is no $12 limitation figure.

"Health, Education and Welfare officials estimated first-year costs of the program at $262 million—$202 million federal and $60 million state. Annual costs are estimated to rise by the end of the fifth year to $340 million federal and $180 million state. However, these estimates admittedly are no more than educated guesstimates because so much depends upon state action.

"It was estimated that maximum participation and a state contribution of $152,000 would bring Missouri $4.8 million in federal matching funds in the first year of the program.

"The medical-care-for-the-aged legislation was included in an omnibus measure titled Social Security Amendments of 1960. It also eliminated the age 50 requirement for eligibility for disability insurance benefits.

"The Senate knocked out of the House bill a provision that would have brought physicians under Social Security coverage.

"On other legislation of interest to the medical profession: Congress passed bills authorizing expenditure of $10 million of counterpart funds abroad to stimulate international research; authorizing up to 15 per cent of National Institutes of Health research grants for nongovernmental medical research; directing a broad study of air pollution problems; requiring informative labeling on packages of hazardous substances for household use, and giving the government power to establish a tolerance on the amount of color additives that may be used in various products.

"The Senate failed to act upon House-approved legislation that would have given physicians and other self-employed persons a tax break on income put into private pension plans (Keogh Bill)."

Mr. Foristel stated that the A.M.A. is encouraging states to give careful consideration to this program and to urge state legislatures to appropriate sufficient funds in order to secure the matching grants.

Mr. O'Brien suggested that it might be well, at the next Council meeting, to consider the implications of the various state programs and what the position of the State Association should be relative to them.

Mr. O'Brien called attention to a letter of thanks received from Dr. Blasingame for the splendid cooperation of the medical profession and others in defeating Forand-type legislation.

MATERNAL WELFARE REPORT

Dr. Krebs presented the report of the Maternal Welfare Committee, in the absence of Dr. Keeler, who could not attend. He reported on the two meetings held, one on May 15 and the other on September 18, as follows:

Birth Certificate

"The following changes in the birth certificate were suggested: The short form, leave off both mother and father for routine use of a birth certificate. Weight be listed in both grams and pounds. The section on diet be deleted.

Under Complications of Pregnancy—Nonpuerperal, subheads be used in Rheumatic Heart Disease, active, inactive, and that a new box be added to show, Other heart diseases. In the section on, Was Mother's Blood Tested for Rh Factor: the words, "if Rh negative" following "mother" be added.

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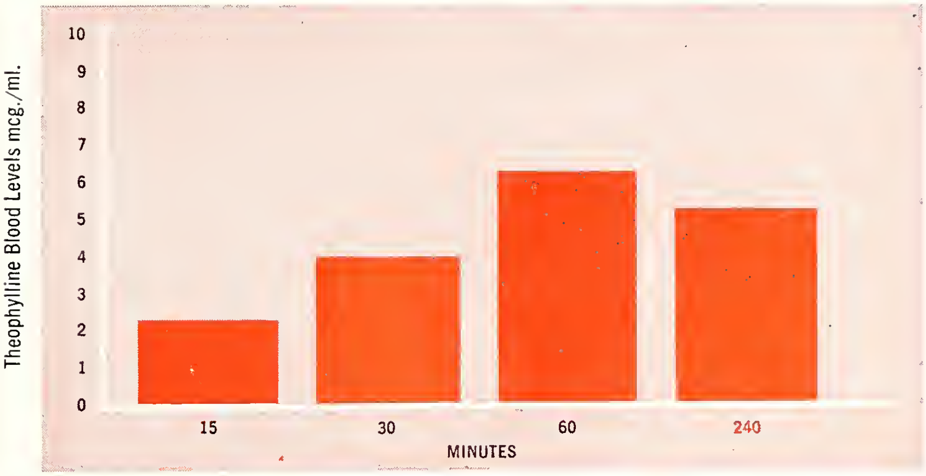

Theophylline sodium glycinate, presented in Elixir Synophylate, offers superior stability and toleration as compared with other forms of theophylline.[1,2] Thus, Elixir Synophylate allows *higher, well-tolerated* dosage, where indicated, to achieve *maximum xanthine effect.*

Each tablespoonful (15 ml.) contains 0.33 Gm. (5 gr.) Synophylate (theophylline sodium glycinate), equiv. 0.16 Gm. (2½ gr.) Theophylline U.S.P.; 20% alcohol. *Supplied:* Bottles of 1 pint and 1 gallon.

1. A.M.A. Council on Drugs: New and Nonofficial Drugs 1960, Philadelphia, Lippincott, 1960, p. 425. 2. Grollman, A.: Pharmacology and Therapeutics, ed. 3, Philadelphia, Lea & Febiger, 1958, p. 208.

Literature on request.
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In the section on Conditions of Labor, 6 (Other malpresentation) be starred, and a 10th question be added as, "Previous Sections." Also add "Membrane ruptured 24 hours or longer. Under Delivery, Sedation, add Analgesia and have only "yes" and "no."

Delete the section on At moment of Delivery Mother was: Under Method of Delivery, 06 Breech-partial extraction should read, "Breech, assisted." Primary should be added in regard to section. Under Condition at Birth, the three headings should read: Spontaneous respiration (under 3 minutes). Spontaneous respiration (over 3 minutes). Resuscitation required.

Under malformation, add Birth Injury, Cleft palate and/or harelip should read, Cleft palate and/or lip. No. 7, cerebral palsy should be deleted. Birth injury should have an asterisk with "Please specify."

Under "Placenta, Abnormal" should have an asterisk with, "Please specify."

Study by Osteopaths

The possibility of including osteopaths in the maternal mortality study was discussed. It was felt that Dr. Hardwicke might call a joint meeting to explore what each group is doing and how coordination might be achieved. Dr. Hardwicke was asked to consult the Council about calling such a meeting.

Legislation

Legislation was discussed and Mr. McIntyre read the following recently enacted legislation in California:

Section 1. Section 211.5 is added to the Health and Safety Code to read:

"211.5. All records of interviews, written reports and statements procured by the state department or by any other person, agency or organization acting jointly with the state department in connection with special morbidity and mortality studies shall be confidential insofar as the identity of the individual patient is concerned and shall be used solely for the purposes of the study. The furnishing of such information to the state department or its authorized representative, or to any other cooperating individual, agency or organization in any such special study, shall not subject any person, hospital, sanatorium, rest home, nursing home or other organization furnishing such information to any action for damages. The provisions of this section shall not apply to general morbidity and mortality studies customarily and continuously conducted by the state department and which do not involve patient identification.

"Nothing in this section shall prohibit the publishing by the state department of statistical compilations relating to morbidity and mortality studies which do not identify individual cases and sources of information or religious affiliations." Effective: Sept. 18, 1959.

It was decided to ask Mr. Noble to study the California law.

Expenses

It was pointed out that the Western Division had been spending about $250 a year for secretarial help, stationery and postage. It was decided to ask that the Association budget up to $500 for the work in the two divisions.

Publishing of Speech

Dr. H. C. Willumsen, St. Joseph, asked permission for a talk, using committee statistics, given before record librarians to be published by the librarians. This was given.

Next Meeting

It was tentatively decided that the next meeting of the Committee would be held in September, possibly the 18th.

Report of September 18 Meeting
Joint Meeting With Division of Health and Osteopaths

Dr. Keeler reported on two meetings called by Dr. Hardwicke where representatives of the Missouri Osteopathic Association, the Missouri Division of Health and Dr. Keeler met to explore what each group is doing in trying to improve maternal welfare and how coordination of programs might be achieved. The Council of the State Association approved such a session at its meeting in June, 1960. The first meeting herein mentioned was held July 28 with Mr. Paul Adams, Executive Secretary, Missouri Association of Osteopathic Physicians and Surgeons, Dr. H. M. Hardwicke and Mr. Tom Dundon of the Missouri Division of Health and Dr. Keeler present. Little was accomplished at this session other than exchange of information which consisted chiefly of furnishing Mr. Adams with copies of the worksheets and definitions used by our Maternal Welfare Committee in maternal death studies.

The second meeting was held on September 1, with Mr. Adams, G. W. Ringland, D.O., Cape Girardeau; L. E. Davidson, D.O., Kansas College of Osteopathy; Dr. Hardwicke and Mr. Dundon, and Dr. Kenneth Nicolay and Dr. Keeler of Kansas City, present. The worksheets and definitions passed out at the first meeting were discussed. The Osteopathic Association representatives were frank in pointing out that they had not to date progressed far in Maternal Welfare Committee activities. They agreed, however, to set up a committee to function in similar fashion to ours. They were given copies of letters our committee sends to attending physicians in maternal death cases.

Change of Fiscal Year

It was voted to change our committee's fiscal year for reporting maternal death studies to run from July 1 through June 30. This will make it easier to coordinate the studies of our committee with those of the Osteopathic Association.

Reprints of Annual Report

Increasing requests for copies of our Committee's Annual Reports are being received from other state Maternal Welfare Committees. These states are making their reports available to us. It is requested that our committee be allowed 50 reprints of our annual report for the year 1960 which is printed in MISSOURI MEDICINE to distribute to other states on request.

Birth Certificate

The Committee requests approval of the Council to send a copy of the new proposed birth certificate form and worksheet agreed upon by our committee and the Division of Health, with an explanatory letter over the signature of this committee to all members of the Missouri State Medical Association for their information, reaction and recommendations.

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The Committee considered a new proposed birth certificate and would like the Council's permission to publish this new form and send it to all members of the Association with a questionnaire.

Dr. Krebs discussed the possibility of obtaining $500 from the State Association for the Eastern and Western Divisions for stationery, postage and secretarial help in their maternal mortality studies.

On motion of Dr. Barger, duly seconded, this report was approved.

CONSTITUTION AND BY-LAWS

Dr. Bull presented the revised Constitution and By-Laws of the Cape Girardeau County Medical Society and asked that they be approved. On motion of Dr. Stuart, duly seconded, these were approved.

GEORGIA BROWN BLOSSER HOME

Mr. O'Brien reported that a letter was received from Dr. Wilson requesting the appointment of a person to represent the Association on the Board of the Georgia Brown Blosser Home, Marshall, Mo. The following names were presented: Mrs. McBurney, of Slater, and Mrs. Jordan Kelling, President of the Woman's Auxiliary. These two suggestions are to be sent to Dr. Wilson.

FIRST ANNUAL DOCTOR'S DAY

Dr. Wilson reported on the first annual M.D. day at the Medical Center which will be held on October 21 and 22, stating that a fine program had been arranged and invited all of the Councilors and the doctors from their districts to be present.

FAMOUS DECEASED PHYSICIANS

Dr. Muether presented a letter from the Contributing Editor of *Postgraduate Medicine*, requesting names of famous deceased doctors to be written up for publication as a medical historical feature. It was suggested that a committee be appointed to discuss this. Dr. Muether, Dr. Furlow and Dr. Doyle were asked to study this.

LICENSING OF PHYSICAL THERAPISTS

Dr. O'Reilly presented the report of the Committee on Physical Medicine and Rehabilitation, calling particular attention to the proposed legislation to license Physical Therapists in Missouri.

The report follows:

Proposed Legislation to License Physical Therapists

The purpose of the meeting was to consider proposed legislation submitted by the Missouri Chapter of the American Physical Therapy Association which contemplates licensure of physical therapists in Missouri.

Dr. O'Reilly reviewed the past history of the proposal, pointing out that the Missouri chapter had submitted a proposal in 1956 which was tentatively approved in principle by the Committee. The Council of MSMA, in considering the Committee report recommended that efforts to secure legislation be delayed until after the joint licensure bills be adopted by the legislature.

Special A.M.A. Committee Report

In the meantime, the American Medical Association created a special committee known as "The Committee on the Relationship of Medicine With Allied Health Professions and Services."

The report of the A.M.A. Committee, adopted by the A.M.A. House of Delegates, June 1960, considered physical therapy legislation in the various states. The report listed 33 states which have statutory regulations, 17 of which have licensing laws and 17 have certification laws. (Note, 2 laws are in effect in California, one a licensure law, the other a certification law.) These laws vary in scope, however, many of them include a provision to the effect that the person licensed or certified must practice physical therapy only on prescription or under the direction or supervision of a licensed physician. This provision is weak though in the case of certification laws because of the nature of such laws.

All of the laws contain some limitation on scope of practice, but the definition differs somewhat from state to state. The most complete definition is in Connecticut. The most specific limitation of scope is found in the Oklahoma law.

In general, the A.M.A. report included the following pertinent statement:

"The medical profession believes that the adoption of a position on governmental (state) regulation which would apply permanently to all health related sciences, professions and services is not in the present nor future interest of the public. In relation to this general principle, the medical profession believes that: (a) The extension of governmental licensure and/or certification for scientific, professional and technical health personnel is not indicated except when it is mutually agreed that such regulation is necessary in the public interest and such regulation is jointly developed and supported by the medical profession and the segments of medicine concerned and the group seeking statutory regulation. (b) If instances do arise in which it is jointly agreed that it is necessary in the public interest that governmental (state) licensure and/or certification be developed for persons in activities directly involving the care of patients: 1) Such statutes must require acceptable educational standards as determined by individuals acknowledged as leaders in education and practice in the field; 2) Such statutes relating to services which involve the diagnosis or treatment of nervous, mental or physical illnesses or disorders of individual patients should require such services to be performed under the direct supervision of or in genuine collaboration with a qualified physician."

Action

After discussion with Miss Lake, of the Physical Therapy group, in which several changes in the proposal were recommended the Committee approved the legislation in principle, as amended, for submission to the Council of MSMA. Miss Lake agreed to discuss the changes with her group and to report back about September 1.

The Committee felt that some provision should be made to control and license the physical therapists, and recommends that the State Association support the Physical Therapists in getting this legislation through.

Mr. Noble reported that he had studied the bill and that it had some weak spots which needed some changes. On motion of Dr. Tillman, duly seconded, the report of the Committee was accepted with the understanding that the Association would endorse the legislation when

(Continued on page 1406)

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it is amended as outlined by our attorney. One Councilor voted against the motion and another asked that he be recorded as not voting.

WHITE HOUSE CONFERENCE ON AGING

Mr. O'Brien reported on the White House Conference on Aging to be held in Washington, D. C., January 9-12, 1961, and stated that Dr. Stanley Peterson, Chairman MSMA Committee on Aging, was appointed as a delegate. On motion of Dr. Summers, duly seconded, it was agreed to pay Dr. Peterson's expenses to attend this meeting.

BUDGET COMMITTEE

The following members were appointed to serve on the Budget Committee: Drs. Doyle, Chairman; Muether, Summers, Barger, Bull, Tillman, and Dr. Dowell, ex-officio. The Budget Committee will meet prior to the next Council meeting, at which time the budget will be presented.

CLAY COUNTY PROBLEMS

Three representatives of the Clay County Medical Society appeared before the Council to present the background regarding membership applications received from physicians employed by the McCleary-Thornton-Minor Hospital and Clinic in Excelsior Springs. Correspondence was presented between the Clay County Medical Society and the A.M.A. regarding the institution. After discussion, and on motion of Dr. Barger, duly seconded, it was agreed that the corporate practice of medicine is involved in the operation of the institution and the advertising practices of the institution are contrary to the rules and regulations of the Clay County Medical Society. It was agreed that a letter be sent to the Clay County Medical Society to that effect. Motion passed.

AMEF

Mr. O'Brien reminded the Councilors that letters were going to the entire membership regarding AMEF, that October is Missouri AMEF Month, and that the Chairman of the MSMA Committee, Dr. Murphy, has asked him to request that the Councilors urge the doctors in their districts to contribute to AMEF.

NEXT COUNCIL MEETING

The next meeting of the Council was set for December 10-11, 1960.

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*J.A.M.A. 163: 359, 1957 (Feb. 2)

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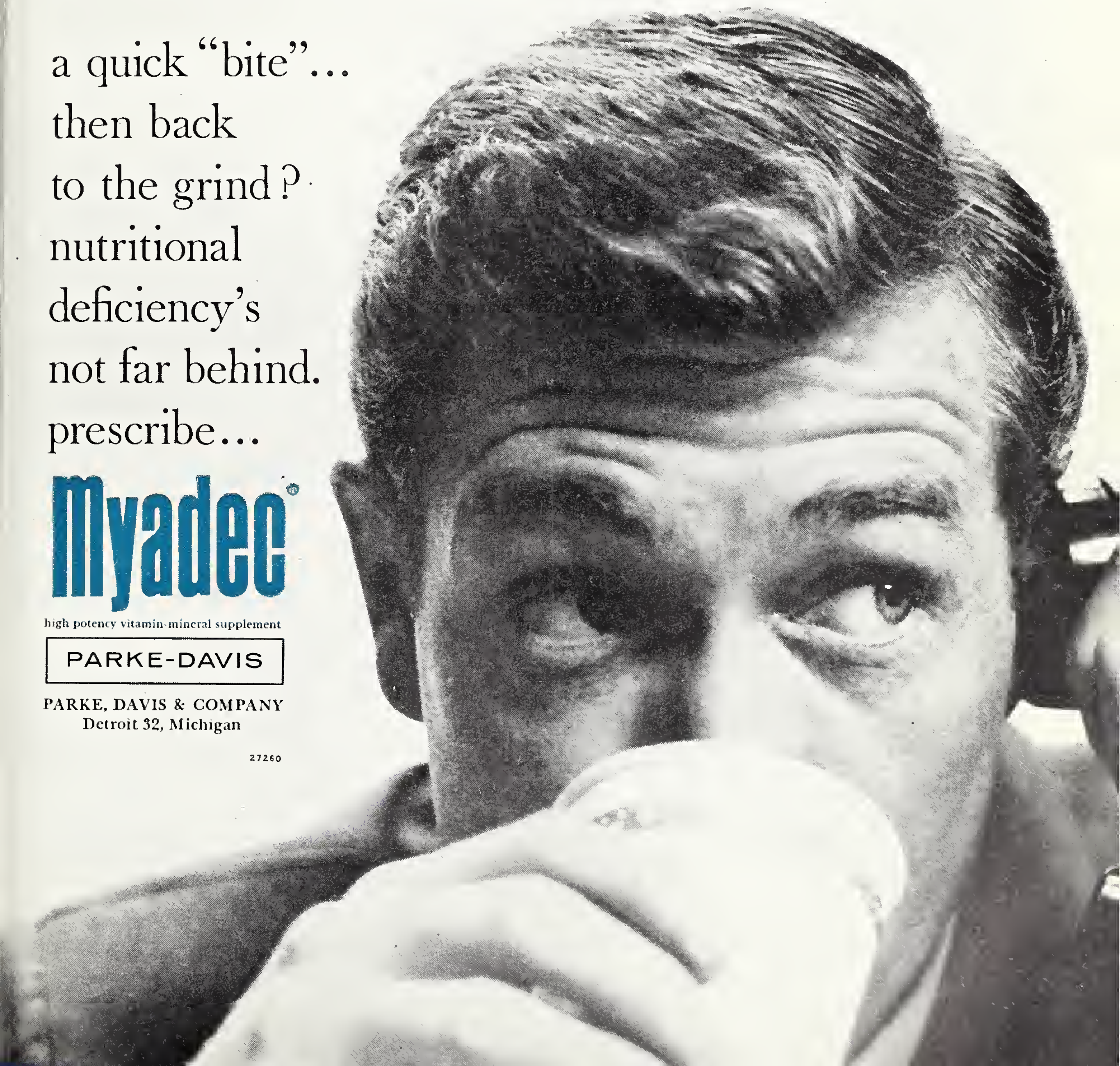

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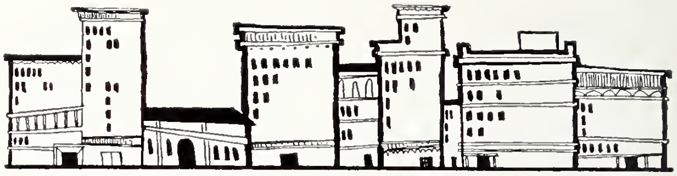

WASHINGTON UNIVERSITY

Student Dormitory Opens

Living accommodations for approximately 132 students have been opened on four floors of the new Spencer T. Olin Residence Hall at Washington University School of Medicine. The 11-story building, located at 4550 Scott Ave., has been under construction since late November of 1958. On completion it will house 295 students. According to Architects Jamieson, Spearl, Hammond and Grolock, floors three through ten will contain dormitory rooms. A non-medical library, music room, chapel, meeting room and manager's suite will be on the first, and a two-story gymnasium will occupy the ground and first floors. Also on the ground floor will be a snack bar and dining room, several music rooms, locker and shower facilities, a laundry and two fraternity rooms. The penthouse floor will feature a social room ringed in floor to ceiling glass. Funds for the $2,252,785 structure have been provided by Medical School alumni and faculty; a gift from Mr. Spencer Olin and a federal loan of $1,400,000.

Lectures, Congresses, Trips

Four staff members of Washington University School of Medicine participated in the First International Congress on Research in Burns in September at the National Naval Medical Center, Washington, D. C. Presenting research were Dr. Harry a Fozzard, assistant in medicine, who discussed "Myocardial Injury in Burn Shock"; Dr. Falls B. Hershey, associate professor of clinical surgery, "Effects of Heat on the Enzymes of Skin," and Dr. Carl A. Moyer, Bixby professor and head of the department of surgery, "Metabolism of Burned Mammals and Its Relationship to Vaporizational Heat Loss." Dr. Moyer and Dr. Eric Reiss, assistant professor of medicine and of preventive medicine, presided at two sessions of the Congress. Represented on the four-day program were scientific investigators from Argentina, Belgium, Canada, Chile, Czechoslovakia, England, France, Germany, Italy, Japan, Mexico, Peru, Scotland, Sweden, the United States, U.S.S.R., and Yugoslavia.

Dr. Simon Horenstein, associate neurologist at Harvard School of Medicine, lectured on "Aphasia" at the October meeting of the St. Louis Society of Neurology and Psychiatry in David P. Wohl Jr. Memorial Hospital Auditorium at Washington University School of Medicine. Dr. Bernard Cruvant and Dr. Herbert Rosenbaum, both assistant professors of clinical neurology at the Medical School, are president and program chairman, respectively.

Dr. A. Duncan Chiquoine, assistant professor of anatomy at Washington University School of Medicine, is in London, England, where he will spend a year conducting research at the Royal Veterinary College of the University of London. The work will be done in the laboratory of Dr. Emmanuel C. Amoroso, professor of physiology. Dr. Chiquoine's wife and four children accompanied him.

Dr. Roy Peterson, assistant professor of anatomy at Washington University School of Medicine, returned to the United States in September following a year's leave of absence in Cambridge, England. Dr. Peterson has been conducting research involving the endocrine glands in the laboratory of Prof. J. Dixon Boyd at the University of Cambridge. His wife and four children accompanied him.

A third member of the department of anatomy, Dr. Sarah Luse, was in Paris in September attending the First International Congress of Histochemists. Dr. Luse, who is associate professor of anatomy and of pathology, also visited laboratories in Copenhagen, Stockholm and London, before returning to St. Louis early in October.

Juliette Alvin, internationally known music therapist from London, England, lectured on and demonstrated music therapy for children at an October meeting in Steinberg Auditorium of Jewish Hospital. Sponsoring organizations were the William Greenleaf Eliot Division of Child Psychiatry at Washington University School of Medicine and the St. Louis County Alumnae Chapter of Mu Phi Epsilon, national professional music sorority. Miss Alvin emphasized music therapy for mentally handicapped and emotionally disturbed children. Her pioneering work in this field has shown that the emotional impact of

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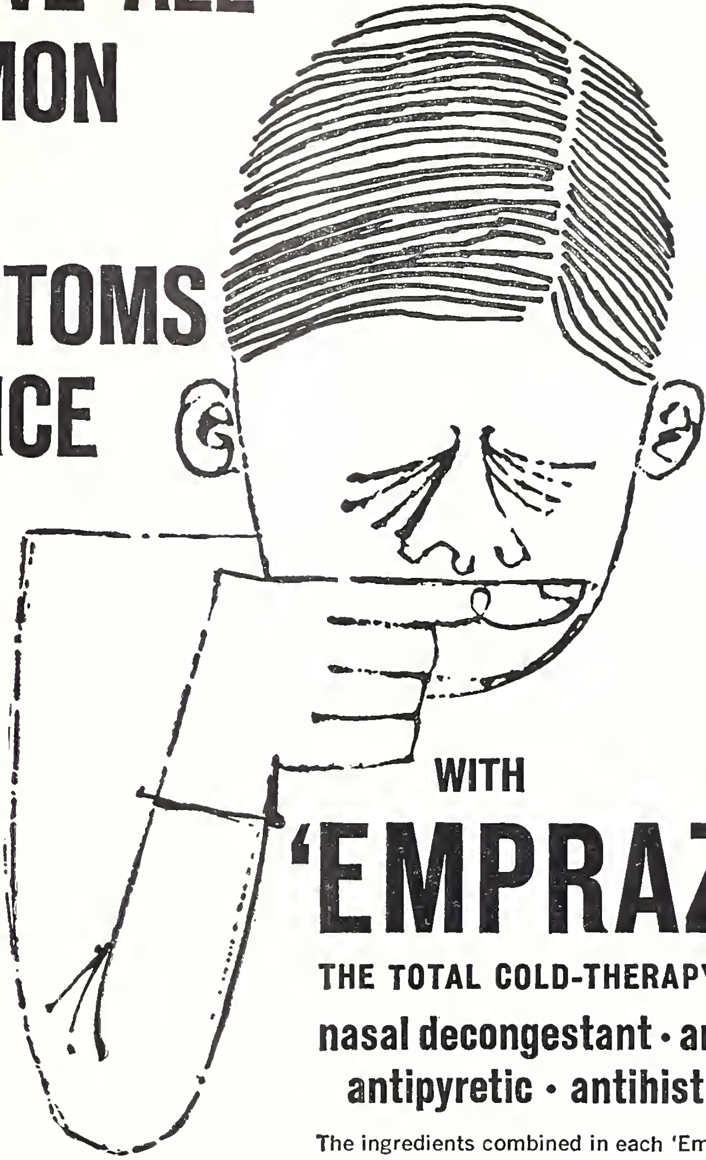

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Washington University School of Medicine, St. Louis University School of Medicine and Jewish Hospital presented a symposium on "Genetic Control of Biochemical Processes in Diseases of Metabolism" in October at Jewish Hospital. Chairmen were Dr. Carl F. Cori and Dr. Edward A. Doisy of Washington and St. Louis Universities, respectively. Participants included: Dr. Lawson Wilkins, Johns Hopkins University School of Medicine, Baltimore; Dr. John B. Stanbury, Massachusetts General Hospital, Boston; Dr. Herman M. Kalckar, Johns Hopkins University School of Medicine, Baltimore; Dr. Barbara Illingworth, Washington University School of Medicine, St. Louis; Dr. Sidney Udenfriend, National Heart Institute, NIH, Bethesda; Dr. Alexander G. Bearn, the Rockefeller Institute, New York; Dr. Irving M. London, Albert Einstein College of Medicine, New York; Dr. Ernest Beutler, City of Hope Medical Center, Duarte, California; and Dr. Amoz I. Chernoff, University of Tennessee Memorial Research Center, Knoxville.

New Appointments

Dr. William G. Klingberg, associate professor of pediatrics at Washington University School of Medicine, has accepted the position of professor and chairman of the department of pediatrics at the West Virginia University School of Medicine, Morgantown, in September. Dr. Klingberg received the medical degree from Washington University School of Medicine in 1943. He served his internship and residency at St. Louis Children's Hospital and has been a member of the Washington University Medical School staff since 1947, when he was appointed assistant in pediatrics. He received the appointment of associate professor in 1954. From April, 1957, until September, 1958, Dr. Klingberg was a visiting professor in the Department of Pediatrics at Ankara University School of Medicine, Turkey.

Grants

United Cerebral Palsy's Research and Educational Foundation recently presented a quarterly check of $4,998 to Washington University, bringing to $60,568 the amount which has been allocated from the Grotto Humanitarian Foundation award in the last three years to support research in the department of psychiatry at the medical school. Presentation of the check was made by John B. Seeck, Monarch of Alhambra Grotto of St. Louis, representing the Grotto Humanitarian Foundation of the Supreme Council, Mystic Order of Veiled Prophets of the Enchanted Realm, to Dr. John A. Stern, associate professor of medical psychology. The $60,568 which has been awarded Dr. Stern, comprises a major portion of a $125,000 appropriation voted in 1957 by the Grotto Humanitarian Foundation for research into cerebral palsy. The Grotto Supreme Council at its recently held 70th annual meeting in Boston, Mass., approved another $125,000 for research in this field during the next five years.

Three members of the Washington University School of Medicine staff were among investigators receiving grants from the American Cancer Society, which awarded $155,184 in July for cancer research in Missouri. Grant recipients were Dr. Oliver H. Lowry, professor and head of the department of pharmacology, to study the cytochemistry of the nervous system; Dr. William Harrington, associate professor of medicine, to conduct studies in basic biochemical lesions in leukemias and lymphomas; and Dr. Edward Reinhard, chairman of the institutional research grants committee and professor of medicine, an institutional grant.

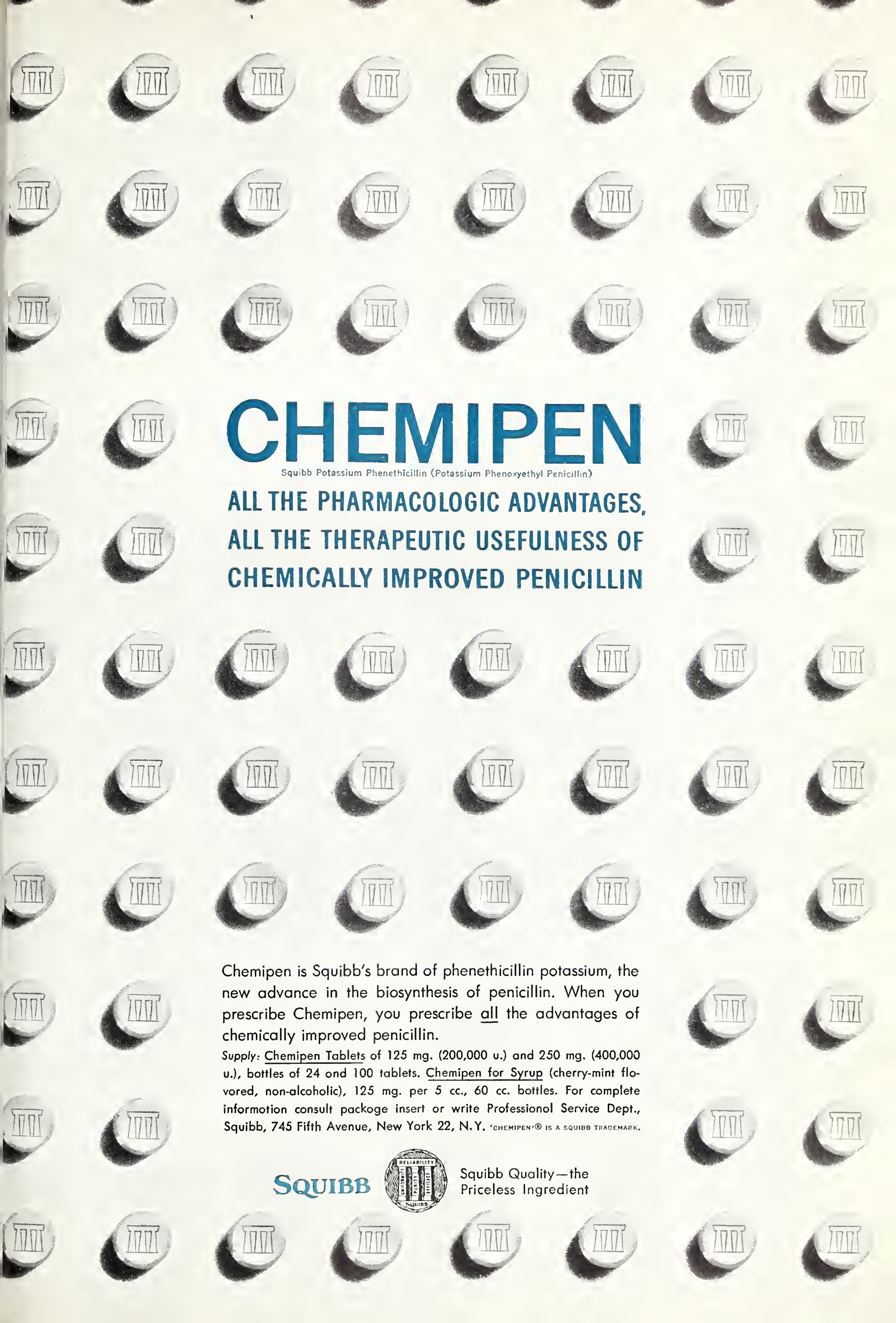
UNIVERSITY OF MISSOURI

Student Attends Congress in Tokyo

Dr. O. P. Jones, vice president of the International Society of Hematology, invited Mr. Larry D. Toalson, a second-year student in the School of Medicine, to attend the International Congress of Hematology in Tokyo, Japan, September 4 through 10. Mr. Toalson's invitation from the International Congress of Hematology stems from the research work he is doing on hemepigments of the blood. Mr. Toalson left August 28 for Tokyo by way of Seattle.

Earlier this year, Mr. Toalson was awarded a post-sophomore Research Fellowship by the Division of the General Health Service of the Department of Health, Education and Welfare. Part of Mr. Toalson's trip is being financed by a travel grant of the Leukemia Guild of Missouri and Illinois.

The research grant from the U.S.P.H.S. was for $3,200 and covers the period of July 1, 1960, through June 30, 1961. This comes under a program which began in March, 1957, and is designed to support exceptional medical students who show promise in research and who elect to drop out of their professional studies for a year to obtain research training. Only one fellowship



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is allowed for each eligible medical school. Mr. Toalson is working in the Department of Pathology under the direction of Drs. Fred V. Lucas and Joseph E. Flynn.

Reception for New Students

A informal reception was held Wednesday afternoon, September 14, at 3 p.m. in the student lounge of the Medical Science Building for the new first-year students.

The reception is an annual affair, providing opportunity for the faculty and students to get acquainted on an informal basis. Refreshments were served.

Dr. Vernon E. Wilson, M.D., Dean and Director of the Medical Center, had welcomed the first year class at Orientation at 9 p.m. that morning.

J. Barton Boyle Appointed Assistant Director

Mr. Jerry Barton Boyle was appointed Assistant Director of the University Hospital by the University of Missouri Board of Curators, beginning August 1, 1960.

Mr. Boyle was previously employed by the University Hospitals of Cleveland, Ohio, as Administrative Assistant. He received a B.S. degree from the University of Missouri in 1955, and a M.B.A. degree from the University of Chicago, Chicago, Ill., in 1957.

Mr. Boyle is a member of the Ohio Hospital Association, the American Hospital Association, and a nominee of the American College of Hospital Administrators, He was born in St. Joseph, Missouri, January 15, 1933. Mr. Boyle is married.

Drs. Stephenson and Schuder Participate In Cardiac Surgery Meeting

Dr. Hugh E. Stephenson, Jr., professor of surgery, and Dr. John Schuder, research associate in surgery, participated in a conference on artificial heart valves for cardiac surgery in Chicago Sept. 9 and 10, at the Edgewater Beach Hotel.

They were invited by the surgery study section of the National Institute of Health, sponsor of the meeting. The possibility of substituting artificial valves for diseased heart valves is becoming increasingly feasible, especially in hearts affected by rheumatic fever and the two Medical Center scientists are participating in further study of the subject.

Psychiatry Staff Members Speak At Omaha Meeting

Dr. James M. A. Weiss, associate professor of psychiatry and Acting Chairman of the Department; Dr. Henry V. Guhleman, Jr., clinical associate professor of neurology and psychiatry; and Dr. David Davis, assistant professor of psychiatry, attended the Sixth Institute for Professors of Psychiatry West of the Mississippi River at the University of Nebraska School of Medicine in Omaha, Nebraska, September 1 through 3.

Drs. Weiss, Guhleman and Davis participated in small group discussions and seminars on the following topics: (1) Integration of Psychoanalysis into the medical college curriculum; (2) postgraduate training programs for general practitioners; (3) integration and/or cooperation of the other departments of a medical college in intern and resident training, and (4) elective programs for undergraduate medical students.

Seventy professional men and women attended the meeting.

Dr. Jackson Attends Meeting

Dr. Robert L. Jackson, professor of pediatrics and Chairman of the Department, attended the Committee on Protein Malnutrition, National Research Council, August 20 to 24 in Washington, D. C. Dr. Jackson was chairman of one of the panel discussions on "Protein Requirements of Children." Participants from various medical centers throughout the world attended the closed meeting.

The Infant Nutrition Committee of the National Research Council met immediately following the meeting on protein malnutrition. All 10 members of the committee attended. Pertinent data presented in the preceding conference was discussed. Each member accepted specific assignment to review an area of knowledge and prepare a report for a late winter or early spring meeting to be held in Columbia.

First Corneal Transplantation

The first surgical operation involving a corneal transplantation on a human eye to be undertaken at the University of Missouri Medical Center was performed September 12, 1960, at the Medical Center.

The operation was performed by Dr. John A. Buesseler, associate professor of surgery and chief of ophthalmology at the Medical Center. He was assisted by Dr. Howard B. Strauss, resident in surgery (ophthalmology), and Dr. W. B. Spalding, Jr., resident in surgery (ophthalmology). The patient was a Missouri resident whose left eye was afflicted with a dense, white clouding of the normally transparent cornea that made the cornea opaque and caused blindness in the eye.

The operation involved removing a disk of the cornea, about five-sixteenths of an inch in diameter, and replacing it with the healthy corneal disk of the same shape and size. The new cor-

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*Floore, F. B.: Wine is Fine for Hospital Cookery, Mod. Hosp. 94:134 (June) 1960.

nea was held in place by sutures around the edge made with an extremely fine nylon monofilament of thread. The operation is considered to be one of the most difficult and delicate in eye surgery. It was performed under local anesthesia.

The cornea that was transplanted on the patient's eye was obtained after death through the humanitarian permission of relatives from a donor who died Sept. 11 at the hospital. The tissue was kept refrigerated until the operation. The operation had been planned previously, but since no emergency was involved, it awaited the availability of a replacement cornea.

The Lions Eye Tissue Bank is directed by Dr. Garth S. Russell, research associate in surgery at the University Medical Center, and an authority on tissue transplantation. He was present at the operation as technical assistant.

Microbiology Announces Grants

The Department of Microbiology announces the receipt of seven grants for the year 1960 totalling almost $70,000.

Dr. Frank B. Engley, Jr., professor of microbiology and Chairman of the Department, is doing research on "The Effect of Microbial Toxins on Heart Tissue Cultures Cells" with funds from the Missouri Heart Association. Dr. Engley is working with the production (growth) of heart tissue cells in the test tube, and the effect of administered bacteria and their products which would produce toxins and disease.

Dr. Herbert S. Goldberg, associate profesor of microbiology, is working on "Epidemiologic Studies on Leptospirosis" in conjunction with Dr. Donald C. Blenden, of the Department of Veterinary Bacteriology and Parasitology with funds from the Institute of Allergy and Infectious Diseases (N.I.H. U.S.P.H.S.). This is a study of the transmission of the disease from domestic and wild animals to the human, and an analysis of the incidence of the disease in this area; and is a continuation of a research project started last year and will continue an additional year following this.

Dr. Goldberg is also doing research on "Antibiotic Residues in Horticultural Crops" in conjunction with Dr. Robert N. Goodman of the Department of Horticulture in the College of Agriculture with funds from the National Institutes of Health of the U.S.P.H.S. The project, concerned with public health aspects of nonmedical use of antibiotics in determining if any hazard exists from the use of antibiotics in food preservation and plant disease control, is now in its fourth year of study.

Dr. Donald P. Durand, assistant professor of microbiology, is doing studies on "Animal Virus

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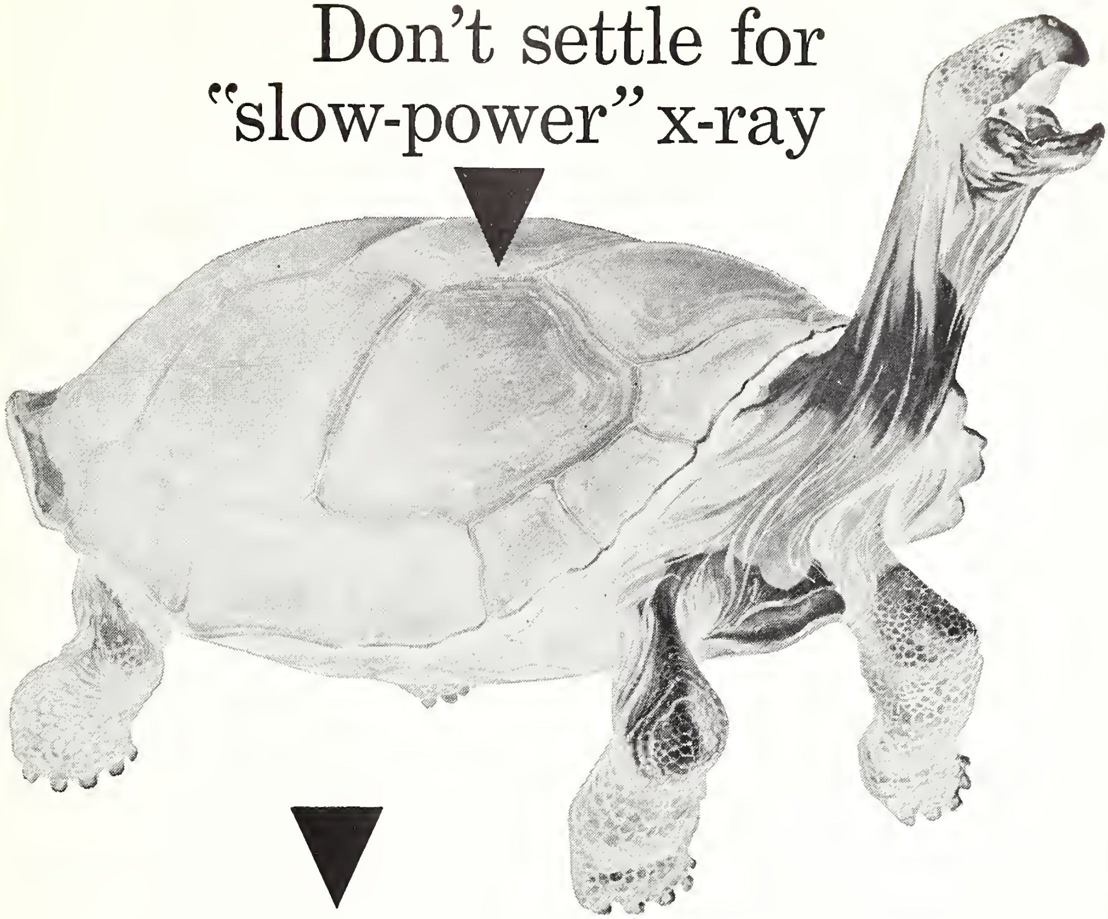

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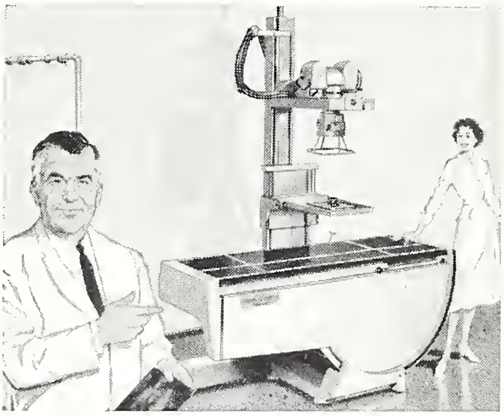

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Variation" with a grant from the National Institutes of Health of the United States Public Health Service for three years. The project is essentially the study of viruses, their ability to change and modify and the reasons why the changes occur continuously.

Dr. Durand will also be working on a project on the "Growth in Tissue Culture of Cells Derived From Nematode Parasites," supported by funds from the Committee on Research of the Council on Drugs of the Amedican Medical Association. This is research on growing tissue from intestinal parasites and the production and growth of virus in this tissue for observation of the reactions.

Dr. Michael H. Ivey, assistant professor of microbiology, will be studying the "Strain Variation of *Trichomonas vaginalis*" in cooperation with the Department of Obstetrics and Gynecology. The grant is from the Institutes of Allergy and Infectious Diseases (N.I.H. U.S.P.H.S.) for two years. He is determining whether strain variation in *Trichomonas vaginalis* are responsible for observed differences in symptomology and response treatment.

Dr. James T. Barrett, associate professor of microbiology, has also received funds from the National Fund for Medical Education to finish his work on the fungus, *Geotrichum candidum* and to study the metabolism of an amino acid, *phosphoserine*, investigating its metabolism by micro-organisms.

The Dean Participates in Panel

Dr. Vernon E. Wilson, Dean of the School of Medicine, and Director of the Medical Center, participated in a panel discussion devoted to Health Careers at the meeting of the Executive Board of the Woman's Auxiliary to the Missouri State Medical Association, September 20, at the Hotel Governor in Jefferson City. "Missouri Health Careers Recruitment" was the panel topic; Dr. Wilson explained the need for recruiting qualified applicants for medical schools.

Dr. Wilson also delivered a welcome speech to the Medical Dames, an association of the medical student's wives, in the Medical Auditorium, September 9 at 8:00 p.m.

Visits Philadelphia

Dr. M. D. Overholser, professor of anatomy and Chairman of the Department, was in Philadelphia for two weeks in August and visited Dr. W. A. Sodeman, Dean of Jefferson Medical College, The Daniel Baugh Institute of Anatomy, University of Pennsylvania School of Medicine, and the Wistar Institute of Anatomy.

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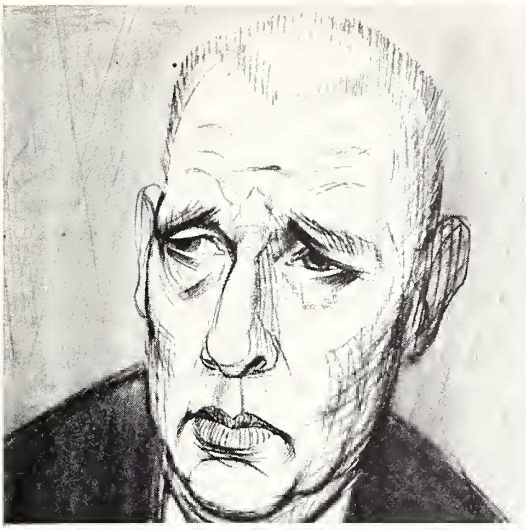

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Attend A.C.S. Meeting

Dr. T. D. Luckey, professor of biochemistry and Chairman of the Department, Dr. Owen J. Koeppe, associate professor of biochemistry, and Dr. Benedict J. Campbell, assistant professor of biochemistry, attended the American Chemical Society meeting in New York City September 11 through 16.

Dr. Luckey presented a paper on "University Research" on the 15th of September, and Dr. Campbell gave a talk on "Copper Complexes of Lysine Vasopressin and Oxytocin" on September 12.

Dr. Luckey presented his talk on "Germfree Lambs Nutrition" at the Fifth International Congress on Nutrition in Washington, D. C., September 1 through 7.

Attends Meeting

Dr. David G. Hall, III, assistant professor of obstetrics-genecology and Acting Chairman of the Department, and Dr. Russell E. Hanlon, assistant instructor in obstetrics-gynecology, attended the District VII American College of Obstetricians and Gynecologists in New Orleans, Louisiana, from Sept. 15 to 17. Dr. Hanlon lectured on "Vaginal Hysterectomy 38 Years Following Watkins Interposition Procedure: A Case Report."

Meetings

Dr. M. Pinson Neal, professor emeritus of pathology, attended the preconvention checkup meeting of all the committees, Sept. 13, for the St. Louis meeting of the Southern Medical Association. The Convention will be held between Oct. 31 to November 3, 1960, in St. Louis. Dr. Neal is a member of the all-advisory committee for the October meeting.

Dr. Neal also attended the Advisement for Pre-Medical Technology Students Sept. 12 in Columbia. Dr. Neal is Director of the Medical Technology Training Program. The meeting was sponsored by the Arts and Science Division of the University. Twenty-one students were present.

Dr. Ira D. Godwin, instructor in pathology, attended the American Association of Blood Banks meeting in San Francisco August 21 to 26. The meeting covered administrative, scientifie and technical sections of Blood Banking, with 900 physicians, medical technologists and blood bank administrators attending.

Participate in Panel

Dr. Robert L. Jackson, professor of pediatrics and Chairman of the Department, and Dr. Venudhar Reddy, assistant instructor in pediatrics, participated in daily panel discussions with sub-

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section meetings of current status of nutrition throughout the world reviewed with the presentation of research studies, in Washington, D. C., September 1 through 7. Two thousand persons were present.

Dr. Jackson also attended the Gordon Research Committee meeting in New London, New Hampshire, August 8 through 12. The meeting accented current advances in nutrition with unusual opportunity for free discussion with outstanding people in the field.

Grant

Dr. M. A. Weiss, professor of psychiatry, and Acting Chairman of the Department, has been awarded a grant in the amount of $2,000 for continuation of research into the mental health problems of older persons. The grant was awarded by the State of Missouri Division of Health.

Dr. Weiss attended the First Mental Health Conference of the State of Missouri, September 8 and 9 in Jefferson City. The meeting was sponsored by the Misouri Division of Mental Diseases. Nearly 145 representative citizens of the state of Missouri were present.

Talks

Dr. David Davis, assistant professor of psychiatry, spoke to the Missouri Ministerial Alliance in Columbia at the Missouri Methodist Church Sept. 7, on "Helping the Alcoholic." Thirty-five local pastors attended the meeting.

Dr. Warren P. Sights, Jr., assistant professor of surgery (neurosurgery), spoke on "Diagnosis of Brain Tumors" to the Marion-Ralls-Shelby Medical Society August 16 in Hannibal.

Dr. Ian M. Thompson, associate professor of surgery (urology), spoke to the Buchanan County Medical Society on "Urinary Incontinence," in St. Joseph, Sept. 7.

Dr. Glenn L. McElroy, clinical assistant professor of surgery (orthopedics), spoke on "Hematoma and Knee Injuries," to the West Central Missouri Medical Society in Nevada, Sept. 8.

Dr. Kenneth K. Keown, professor of surgery (anesthesia), addressed the American Association of Nurse Anesthetists August 29 in San Francisco, Calif. His topic of discussion was "Anesthesia for Heart Surgery."

Dr. Keown also participated in a panel of doctors and Missouri University Athletic Staff at the West Central Missouri Medical Society meeting in Nevada, Sept. 8. The program was sponsored by the Postgraduate Medical Educa-

(Continued on page 1424)

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tion Committee. "Athletic Injuries" was the topic for discussion.

Dr. J. M. Martt, associate professor of medicine, spoke before the Iowa Heart Association (Northwestern Iowa Heart Council), October 13, in Fort Dodge, Iowa. "Diagnosis of Common Congenital Heart Defects" was the topic in relation to a new film, just completed at the Medical Center at the University. This was the first public showing of the new colored motion picture, prepared by the cardiovascular laboratory here.

ST. LOUIS UNIVERSITY

Lectures

Dr. R. Walter Schlesinger, director of the department of microbiology at the St. Louis University School of Medicine, presented a paper before the first Pan American Congress of Experimental Biology and Pathology held in Caracas, Venezuela, September 24 to October 1. Dr. Schlesinger was a guest at the Venezuelan Institute for Scientific Investigation.

He reported on "Studies on the Propagation of Dengue Virus in Different Host System." Dengue is a virus disease prevalent in tropical and subtropical countries, which has at times spread from the Caribbean into the continental United States.

Dr. Schlesinger has worked on dengue virus since World War II, when he was associated with Dr. Albert B. Sabin. Dr. Schlesinger developed the first experimental vaccine for the prevention of the disease.

Since then, different types of dengue viruses have been studied in the laboratory and for the last five years, Dr. Schlesinger and his associates in the department of microbiology have used dengue virus as a representative model for a large group of mosquito transmitted human virus diseases, one of which is St. Louis encephalitis.

Recent work done in association with Dr. Thomas M. Stevens, instructor in microbiology, and Miss Irene Schultz, has been concerned mainly with adaptation of dengue virus to mice and tissue cultures, with attempts to grow tissues of transmitting insects in test tubes, and with the behavior of an infectious nucleic acid component extracted from the virus. Dr. Schlesinger will report on this work in Caracas.

Dr. Richard A. Morton, profesor of biochemistry at the University of Liverpool, England, delivered the annual Hanau W. Loeb lecture sponsored by the Alpha Pi Chapter of Phi Delta Epsilon Medical Fraternity of the St. Louis University School of Medicine on September 26. His lecture was entitled "Vitamin A: Prospect and

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Retrospect." An internationally known biochemist, Dr. Morton is a member of the Royal Society in England and a fellow of the Royal Institute of Chemistry. He was awarded his Doctor of Philosophy degree from the University of Liverpool.

Dr. Morton is noted for the isolation of Ubiquinone, a natural occurring compound widely distributed in nature. It is part of the electron transport system, which converts food to energy in the body. Ubiquinone is chemically similar to vitamins A and K.

The annual Hanau W. Loeb lecture is held annually in honor of the late Hanau W. Loeb, who served as dean of the School of Medicine from 1914 to 1927.

Dr. Sidney Goldenberg, senior instructor in medicine and a research associate in the Institute of Experimental Pathology, was guest of honor at the Annual Banquet of the Michigan State Diabetes Society held in Detroit, Mich. He spoke on "New Concepts in Vascular Disease of Diabetes Mellitus" based on research which he and research associates have been carrying on for nine years. Dr. Goldenberg also served on a panel on "Diabetic Vascular Disease" as a part of the joint program of the Michigan State Diabetes Society and the Michigan State Medical Society.

Dr. C. Rollins Hanlon, director of the department of surgery spoke before the Cincinnati Surgical Society meeting September 14. He delivered a paper entitled "The Role of Cholangiography in Surgery of the Biliary Tract." Dr. Hanlon and Dr. Vallee L. Willman, assistant professor of surgery, also participated in a conference on "Prosthetic Valves for Heart Surgery" in Chicago September 9-10.

Grant Award

The National Heart Institute of the United States Public Health Service has awarded a grant of $20,435 to Dr. Carlo P. Caciolo, senior instructor in internal medicine at the School of Medicine. The award is for a three year period.

Under the grant, Dr. Caciolo will experimentally produce acute and chronic cardiac strain in animals in an effort to better understand the role of the metabolism of the adrenal medulla in the human circulatory system.

Dr. Caciolo will study the role of the adrenal medulla in different types of acute and chronic cardiac strains such as acute coronary occlusion and aortic stenosis and insufficiency. The study is being conducted in the experimental cardiology laboratory of the department of internal medicine.

Born and educated in Rome, Italy, Dr. Caciolo came to the United States as a Fulbright Scholar in 1952. Following his residency in internal medicine at St. Mary's Hospital in Rochester, New York, he came to the University as a St. Louis Heart Association Fellow in 1954. He has been engaged in heart research since that time.

Fourteen new members of the medical faculty were announced by the Very Reverend Paul C. Reinert, S.J., President of the University. The total includes one with rank of assistant professor, two senior instructors and 11 instructors. The appointments are in addition to seven previously announced appointments. They are as follows: Dr. Theodore Cooper, assistant professor of surgery; Dr. K. K. Govind-Menon, senior instructor in pharmacology; Dr. Gerhard H. Muelheims, senior instructor in internal medicine; Dr. Arron M. Bernstein, instructor in internal medicine; Dr. John A. Gantz, instructor in internal medicine; Dr. Charles W. Griege, instructor in internal medicine; Dr. William Leightner, instructor in internal medicine; Dr. John C. Loper, instructor in pharmacology; Dr. Arthur S. Nunn, instructor in physiology; Dr. James H. Utley, instructor in internal medicine; Dr. Joseph B. Vacca, instructor in internal medicine; Dr. Robert T. Van Norman, instructor in surgery; Dr. Joel L. Zeffren, instructor in internal medicine and Dr. Horst Zekert, instructor in internal medicine.

SOUTHERN MEDICAL SESSION TO EMPHASIZE SOCIAL SECURITY CHANGE

All Missouri physicians are invited to attend the showing of a recently released motion picture describing the preparation of medical reports requested by patients filing social security disability claims. The film will be shown during the meeting of the Southern Medical Association in St. Louis October 31 to November 3. The time scheduled for the film, entitled "The Disability Decision" is at 11:30 a.m., Wednesday, November 2. The film was produced by the Bureau of Old Age and Survivors Insurance in cooperation with the American Medical Association. It will be shown at Kiel Auditorium as part of the program of the Industrial Medicine and Surgery Section of the Southern Medical Association.

"The Disability Decision" clarifies the doctor's role in the social security disability program —the kind and extent of medical information he is asked to provide and how that information is

(Continued on page 1438)

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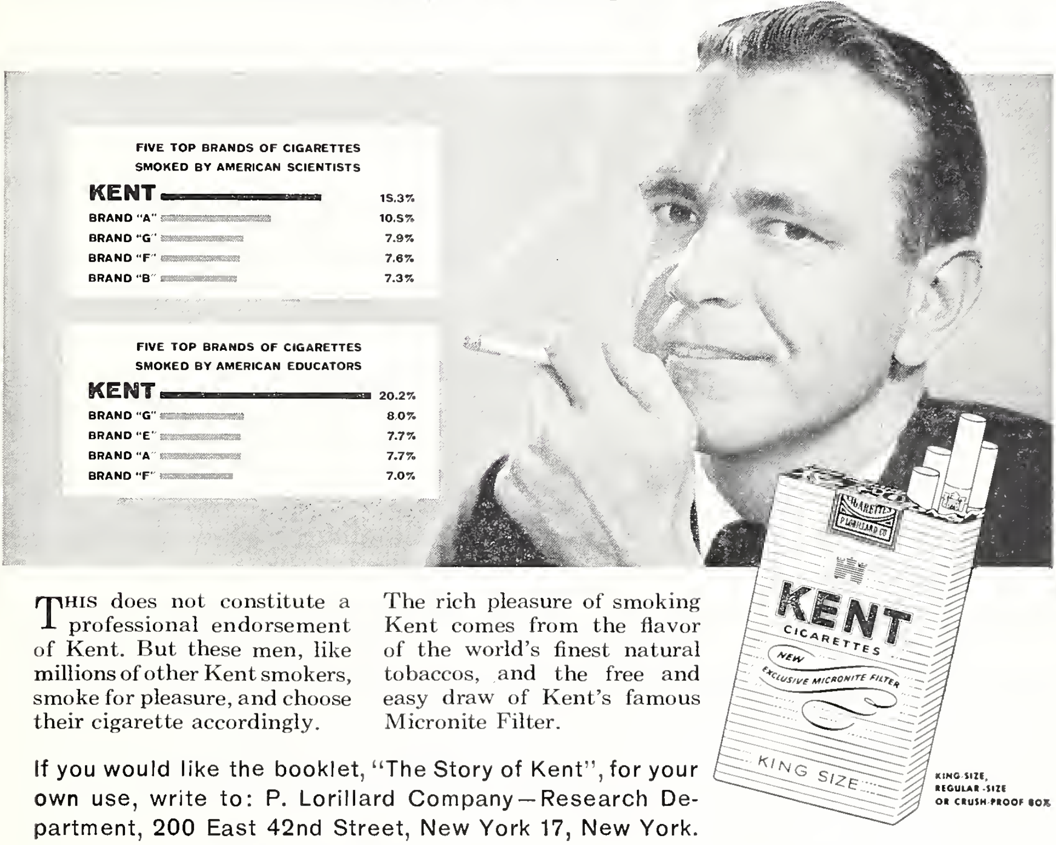
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September 1, 1960

To the Editor:

It is my privilege and pleasure to serve as Chairman of the Missouri State Committee of the Health Insurance Council for its present year.

As you may know, the Council, now in its fourteenth year, is a federation of eight insurance associations representing insurers underwriting in excess of 90 per cent of the health insurance premiums written by insurance companies, that its purpose is to serve as a medium for interpreting the health insurance business to those special segment of the public, the doctors and hospitals, who are purveyors of health care services. It seeks to define the problems in which doctors have a common interest, to uncover such problems and to assist in their solution.

State committees like ours are operating in nearly all the states. The membership of each is broadly representative of the health insurance business within the state. They are the "grass roots program" of the Council, available at all times to serve as a liaison between the insurance industry and the doctors, hospitals and paramedical groups within the state.

With the health insurance companies providing Hospital Expense Benefits for 7,798,000 of the 123,038,000 individuals in the United States who had that type of protection as of December 31, 1958, 69,125,000 of the 111,435,000 who had Surgical Expense protection, 35,142,000 of the 75,395,000 who had regular Medical Expense coverage and 16,229,000 who had Major Medical Expense insurance, this umbrella of protection results in many dealings between the doctors and the insurance companies and becomes the source of a goodly portion of doctors' income.

Recognizing this close relationship, we of the Missouri State Committee want to be of whatever service we can to the members of medical societies, serving as the medium through which a sincere effort may be made to adjust any differences which may arise between any of them and an insurance company, as a body to receive your suggestions for improvement of service to your members (at all times invited and welcomed) and as a means of communication between us.

Our Committee stands ready to do whatever seems necessary to maintain the most beneficial relationship possible between the doctors in Missouri and the Health insurance industry and asks that you contact it whenever, in your opinion, anything further can be done to better attain that objective, other than to change any company's coverage program since as to that our Committee has no jurisdiction.

Sincerely yours,
Emil E. Brill, *Chairman*
Missouri State Committee
Health Insurance Council
P. O. Box 396, Main Post Office
St. Louis 66, Missouri

AMERICAN MEDICAL ASSOCIATION
535 North Dearborn Street
Chicago 10, Illinois

September 7, 1960

To the Editor:

I would like to take this opportunity to thank you, members of the medical profession, and others in Missouri who cooperated so splendidly these past two years in our effort to defeat Forand-type legislation.

It would be my personal wish to be able to write to each individual member of your organization to express my appreciation for their cooperation in winning this important battle for American medicine, but I am sure you realize this task would be most difficult in the light of many persons who assisted us.

Certainly the physicians in your state must recognize the vast amount of time and effort spent by your officers and certain other doctors in Missouri.

Other organizations should not be overlooked. I read many friendly editorials in Misouri newspapers. The cooperation of the Missouri Farm Bureau and Chamber of Commerce certainly was a help in this effort.

After each visit to your State, our field representatives, Rueben Dalbec and Martin Baker reported the freindly cooperation they received from the executive office and all with whom they visited.

Again, thanks for your help, and I hope you will kindly relay my personal gratitude to all in Missouri who helped bring about this decisive victory.

Sincerely yours,
F. J. L. Blasingame, M.D.
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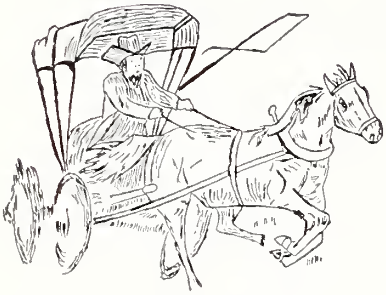
LEO H. POLLOCK, M.D.

Missouri Medicine in Review



FORTY YEARS AGO

Dr. M. P. Ravenel of Columbia, Director of Preventive Medicine at the State University, was elected president of the American Public Health Association at the annual meeting held in San Francisco recently.

Dr. C. W. Burrill of Kansas City was elected Surgeon-General of the Grand Army of the Republic at the national encampment which was recently held in Indianapolis. Dr. Burrill was medical director, Department of Missouri, of the G. A. R., in 1919 and was reelected to that position this year. He has practiced in Kansas City for over forty years and was elected an honorary member of Jackson County Medical Society last February.

The C. V. Mosby Company of St. Louis, medical book publishers, announce the establishment of the *American Journal of Obstetrics and Gynecology* which will represent the American Gynecological Society, the American Association of Obstetricians and Gynecologists, and the obstetrical societies of New York, Philadelphia and Brooklyn. This will be the only journal published in the English language devoted to obstetrics and gynecology and will rank with the principal publications produced in foreign countries. Dr. George W. Kosmak of New York is the editor and Dr. Hugo Ehrenfest of St. Louis, associate editor. Assisting these gentlemen is an editorial board of thirty-three others who have attained eminence in this field, among whom we note the following Missouri physicians: Drs. H. S. Crossen, George Gellhorn and Henry Schwarz of St. Louis. The subscription price of the *American Journal of Obstetrics and Gynecology* is $6.00 per annum.

Dr. William T. Coughlin of St. Louis has been appointed director of the department of surgery of the St. Louis University Medical School.

Dr. John R. Caulk of St. Louis was elected chairman of the surgical section of the Southern Medical Association at the recent meeting held in Louisville.

The child hygiene division of the state board of health has begun a health survey of St. Joseph under the direction of Dr. C. P. Knight, director of the division of child hygiene.

Dr. Ellsworth Smith of St. Louis was elected president of the Mississippi Valley Medical Association at the meeting held in Chicago, October 26-28. About 100 members were present. The 1921 convention will be held in St. Louis.

TWENTY-FIVE YEARS AGO

Dr. J. R. Bruce, Marshfield, has been appointed county health commissioner of Webster County. Dr. Bruce has been serving as county physician.

Dr. J. W. Thompson, St. Louis, addressed the regional meeting of the American College of Physicians at Springfield, Illinois, recently. His subject was "Surgical Treatment of Gastric and Duodenal Ulcer."

The Saline County Medical Society has changed its meetings from Monthly to Quarterly because of the meetings of the staff of the Fitzgibbons Hospital which are held monthly. The membership of the two organizations is the same.

Dr. Thomas Fitz Hugh, Philadelphia, associate professor of clinical medicine in the University of Pennsylvania School of Medicine, spoke on "Recent Advances in Clinical Hematology" before the Kansas City Academy of Medicine on October 18.

The American Board of Otolaryngology will hold an examination in Kansas City, Missouri, May 9, 1936, preceding the meeting of the American Medical Association, and in New York City in October, 1936, just prior to the meeting of the American Academy of Ophthalmology and Otolaryngology, the exact date not having been set.

The Southeast Missouri Medical Association held its fifty-ninth annual meeting at Ste. Genevieve on October 9 and 10. Dr. C. E. Fallet, De Soto, president, was in the chair. Dr. P. S. Tate, Farmington, was installed as president. Dr. Samuel E. Mitchell, Malden, was elected president-elect; Dr. W. Harry Barron, Fredericktown, was elected vice-president; Dr. Paul Baldwin, Kennett, was reelected treasurer and Dr. R. C. Kitchell, Sullivan, and Dr. John D. Van

(Continued on page 1438)

as it calms anxiety!

Smooth, balanced action lifts depression as it calms anxiety... rapidly and safely

Balances the mood – no "seesaw" effect of amphetamine-barbiturates and energizers. While amphetamines and energizers may stimulate the patient –*they often aggravate anxiety and tension.*

And although amphetamine-barbiturate combinations may counteract excessive stimulation–*they often deepen depression.*

In contrast to such "seesaw" effects, Deprol's smooth, *balanced* action lifts depression as it calms anxiety–both at the same time.

Acts swiftly – the patient often feels better, sleeps better, within a few days. Unlike the delayed action of most other antidepressant drugs, which may take two to six weeks to bring results, Deprol relieves the patient quickly – often within a few days. Thus, the expense to the patient of long-term drug therapy can be avoided.

Acts safely – no danger of liver damage. Deprol does not produce liver damage, hypotension, psychotic reactions or changes in sexual function–frequently reported with other antidepressant drugs.

Bibliography *(13 clinical studies, 858 patients)*: **1.** Alexander, L. (35 patients): Chemotherapy of depression – Use of meprobamate combined with benactyzine (2-diethylaminoethyl benzilate) hydrochloride. J.A.M.A. *166*:1019, March 1, 1958. **2.** Bateman, J. C. and Carlton, H. N. (50 patients): Meprobamate and benactyzine hydrochloride (Deprol) as adjunctive therapy for patients with advanced cancer. Antibiotic Med. & Clin. Therapy 6:648, Nov. 1959. **3.** Beerman, H. M. (44 patients): The treatment of depression with meprobamate and benactyzine hydrochloride. Western Med. *1*:10, March 1960. **4.** Bell, J. L., Tauber, H., Santy, A. and Pulito, F. (77 patients): Treatment of depressive states in office practice. Dis. Nerv. System 20:263, June 1959. **5.** Breitner, C. (31 patients): On mental depressions. Dis. Nerv. System 20:142, (Section Two), May 1959. **6.** Gordon, P. E. (50 patients): Deprol in the treatment of depression. Dis. Nerv. System *21*:215, April 1960. **7.** Landman, M. E. (50 patients): Clinical trial of a new antidepressive agent. J. M. Soc. New Jersey. In press, 1960. **8.** McClure, C. W., Papas, P. N., Speare, G. S., Palmer, E., Slattery, J. J., Konefal, S. H., Henken, B. S., Wood, C. A. and Ceresia, G. B. (128 patients): Treatment of depression – New technics and therapy. Am. Pract. & Digest Treat. *10*:1525, Sept. 1959. **9.** Pennington, V. M. (135 patients): Meprobamate-benactyzine (Deprol) in the treatment of chronic brain syndrome, schizophrenia and senility. J. Am. Geriatrics Soc. 7:656, Aug. 1959. **10.** Rickels, K. and Ewing, J. H. (35 patients): Deprol in depressive conditions. Dis. Nerv. System 20:364, (Section One), Aug. 1959. **11.** Ruchwarger, A. (87 patients): Use of Deprol (meprobamate combined with benactyzine hydrochloride) in the office treatment of depression. M. Ann. District of Columbia 28:438, Aug. 1959. **12.** Settel, E. (52 patients): Treatment of depression in the elderly with a meprobamate-benactyzine hydrochloride combination. Antibiotic Med. & Clin. Therapy 7:28, Jan. 1960. **13.** Splitter, S. R. (84 patients): Treatment of the anxious patient in general practice. J. Clin. & Exper. Psychopath. In press, April-June 1960.

Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this dose may be gradually increased up to 3 tablets q.i.d.

Composition: 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl) and 400 mg. meprobamate.
Supplied: Bottles of 50 light-pink, scored tablets. Write for literature and samples.

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SOUTHERN MEDICAL ASSOCIATION

(Continued from page 1426)

used in reaching the decision: Is the patient disabled under the terms of the social security law?

The film is especially practical because of the recent amendment to the social security law which now permits disabled persons under the age of 50 to receive cash payments. Disability benefits to those aged 50 to 65 have been payable since 1956.

According to information recently released by the Social Security Administration, Dr. Frenkil said, many severely ill or handicapped residents of Missouri are affected by this change in the law but have not previously filed social security disability claims because they were not eligible to receive cash benefits under the old law. These residents will cause a significant increase in the number of requests for medical reports area physicians can expect to receive in the near future, it is pointed out.

WOMAN'S AUXILIARY

(Continued from page 1344)

subject of "Mental Health" from so many angles. There were the judges of our courts, the social welfare workers, the medical profession and its allied services, our legislators, leaders of religious fields, the press, prominent citizens and representatives from groups such as our organization—all with questions relating to roles they play in their particular fields, and with helpful suggestions. The Ten Year Program aimed at improving, among other things, our understaffed and overcrowded institutions, was explained and discussed. Missouri has a high hill to climb to catch up with the progress of modern psychiatry.

We have been going visiting in September, and it is these visits that make us sense the swell of effort going into Auxiliary work. There is the Cape Girardeau Auxiliary, a grand group, working along in their far-out post in Missouri and doing grand work in all the departments. There was the Perry County Auxiliary, with ten members who can count in their ten families over 40 children of pre-school or school age, but who carry on a great program. We saw the original skit that St. Louis County presented which should go on tour around the state to proclaim the Auxiliary story; we visited Clay County where they told us that in their six year recruitment program they have helped twenty-six girls through nurses training. We went to the Sixth District meeting at Warrensburg, and were thrilled that there was a representative from every county at that meeting. At Saline County we gasped when we heard how many gift subscriptions of *Today's Health* had been sent to the school teachers in the county.

This is the month of the great American observance of Thanksgiving Day. I often think how lonely the Pilgrims must have felt when the *Mayflower* set sail for England, leaving them on the shore of this new land. I wonder if I could ever have had the courage to have stood there, watching the boat leave for home without me. These were people of courage and self-reliance who stayed on shore and they gave us a precious heritage of a free land where private enterprise could be a rewarding way of life. It is up to us to preserve and enhance that heritage.

MISSOURI MEDICINE IN REVIEW

(Continued from page 1430)

Cleve, Malden, were reelected recording and corresponding secretaries, respectively.

Missouri has been a part of the Southern Medical Association for twenty years but the twenty-ninth annual meeting which will convene in St. Louis, November 19-21, will offer Missouri its first opportunity to be host to the Association. There are 250 members of the organization in Missouri; the total membership is well over 6,000. The Southern Medical Association was organized at Chattanooga in 1906.

TEN YEARS AGO

The Southern Medical Association will meet in St. Louis, November 13 through 16, with the St. Louis Medical Society as host. Edwin C. Ernst, M.D., St. Louis, is general chairman for the session, and vice general chairmen are Drs. J. W. Thompson, Robert J. Mueller and Llewellyn Sale, St. Louis.

Charles A. Brasher, M.D., Mount Vernon, has been elected the Missouri Governor for the American College of Chest Physicians for the years 1950 and 1951.

James R. McVay, M.D., Kansas City, was reelected chairman of the Council on Medical Service of the American Medical Association at a meeting in Chicago, September 14 and 15.

Curtis H. Lohr, M.D., St. Louis, was elected regent of the American College of Hospital Administrators at a meeting in Atlantic City on September 19.

Ira H. Lockwood, M.D., Kansas City, has been elected an honorary member of the Detroit Roentgen Ray and Radium Society, for "Outstanding contributions to medicine and the advancement of the science of radiology."

in diuresis

salt removal is still the fundamental objective

As salt goes, so goes edema

A fundamental principle of diuresis is that "increased urine volume and loss of body weight are proportional to and the osmotic consequences of loss of ions."[2] New NaClex helps reduce edema through the application of this basic principle.

Apparently functioning in the proximal renal tubules, NaClex strictly limits the reabsorption of sodium and chloride ions. To maintain the essential, subtle balance between salt and water, the body's homeostatic mechanism reponds to this loss of ions by allowing an increased excretion of excessive extracellular water. Thus the NaClex-induced removal of salt leads directly to the reduction of edema.

How potent is benzthiazide?
Compared tablet for tablet with oral diuretics now available, NaClex is unsurpassed in potency. Milligram for milligram, it has achieved optimum diuresis in pharmacologic studies at 1/20 the dose required for chlorothiazide.

What are the major diuretic indications for NaClex?
NaClex produces diuresis, weight loss, and symptomatic improvement in edema associated with conditions such as congestive heart failure, cirrhosis of the liver, chronic renal diseases (including nephrosis), premenstrual tension, toxemia of pregnancy, and obesity. Edema of local origin and that caused by steroids may also benefit.

To what extent is NaClex useful in hypertension?
NaClex has definite antihypertensive properties, and may be used alone in mild hypertension. In severer cases it may be used with other antihypertensive drugs, potentiating them and permitting their use at lower dosage. In hypertension with associated water retention, NaClex is of twofold value. It may be prescribed for congestive heart failure as an ancillary measure to digitalis.

Is potassium excretion a problem with NaClex?
In short-term therapy, excessive potassium excretion is unlikely. In the effective dose range, potassium loss varies from ⅙ to ½ that of sodium. Naturally, the ratio of these ions depends on the rate at which excess sodium stores are depleted, and whether salt intake is restricted.

Can NaClex and mercurials be given concurrently?
Yes. When so employed, NaClex may increase the efficacy of mercurials. But NaClex alone is often effective enough to eliminate the need for parenteral mercurial administration. Also, NaClex may be effective in cases when mercurials are not.

Supply: Available in yellow, scored 50 mg. tablets.

References: 1. Ford, R. V., Cur. Therap. Res., 2:51, 1960. 2. Pitts, R. F., Am. J. Med., 24:745, 1958.

For complete dosage schedules, precautions, or other information about new NaClex, please consult basic literature, package insert, or your local Robins representative, or write to A. H. Robins Co., Inc., Richmond, Va.

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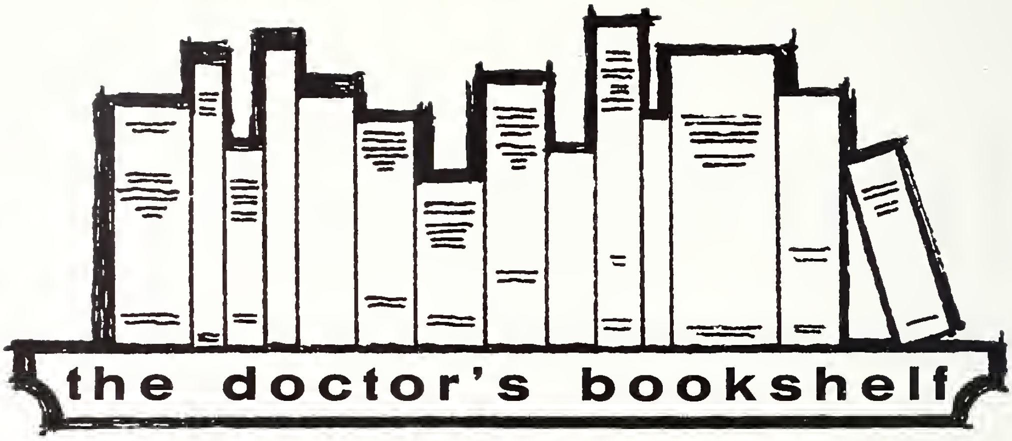

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Medicine Today: A Report on a Decade of Progress, by Marguerite Clark. Funk & Wagnalls Company, New York, 1960. Price: $4.95.

Office Diagnosis, by Paul Williamson, M.D., W. B. Saunders Company, Philadelphia and London, 1960. Price: $12.50.

Diseases of the Newborn, by Alexander J. Schaffer, M.D., Associate Professor of Pediatrics, The Johns Hopkins Medical School, and Pediatrician to The Johns Hopkins Hospital; Attending Pediatrician to The Sinai Hospital of Baltimore, Maryland; Chief of Pediatrics (Nursery Service), The Hospital for the Women of Maryland. With a Section on Neonatal Cardiology by Milton Markowitz, M.D., Assistant Professor of Pediatrics, The Johns Hopkins Medical School, and Pediatrician to The Johns Hopkins Hospital; Attending Pediatrician and Director of the Division of Pediatric Cardiology, The Sinai Hospital of Baltimore, Maryland. W. B. Saunders Company, Philadelphia and London, 1960. Price: $20.00.

Rudolph Matas, A Biography of One of the Great Pioneers in Surgery, by Isidore Cohn, M.D., with Hermann B. Deutsch. Doubleday & Company, Inc., Garden City, New York, 1960. Price: $5.95.

Your Child's Care, 1001 Questions and Answers, by Harry R. Litchfield, M.D., and Leon H. Dembo, M.D. Doubleday & Company, Inc., Garden City, New York, 1960. Price: $3.95.

Practical Clinical Management of Electrolyte Disorders, by William J. Grace, Director of Medicine, The St. Vincent's Hospital of the City of New York; Professor of Clinical Medicine, New York University School of Medicine. Formerly, Associate Professor of Medicine, Cornell University Medical College. Appleton-Century-Crofts, Inc., New York, 1960. Price: $4.95.

Help-Bringers: Versatile Physicians of New Jersey, by Fred B. Rogers, M.D., Temple University School of Medicine. Vantage Press, New York, Washington, Hollywood, 1960. Price: $2.95.

Bedside Diagnosis, by Charles Seward, M.D., Physician, Royal Devon and Exeter Hospital; Consulting Physician, Princess Elizabeth Orthopaedic Hospital, West of England Eye Infirmary and The Ministry of Pensions; Honeyman Gillespie Lecturer; Late Adviser in Medicine to Eastern Command, India; Late Deputy President, Review Medical Board, India. The Williams and Wilkins Company, Baltimore, 1960. Price: $6.00.

Medical Research and the Death Penalty, by Jack Kevorkian, M.D. Vantage Press, New York, Washington, Hollywood, 1960. Price: $2.50.

Current Surgical Management II, edited by John H. Mulholland, M.D., Editor-in-Chief, New York University College of Medicine; Edwin H. Ellison, M.D., Marquette University School of Medicine; Stanley R. Friesen, M.D., University of Kansas Medical Center. W. B. Saunders Company, Philadelphia and London, 1960. Price: $8.00.

Curiosa et Trivia

WILLIAM B. McCUNNIFF

As of now, about thirty-one million Americans are potentially eligible for some sort of direct medical or hospital benefits from the federal government.

After an airman had delivered his own wife at home, his Military Air Transport Service unit added a note to its monthly tonnage report: "One 6 pound 5 ounce girl off-loaded to base hospital. Mother, daughter, and loadmaster doing fine." The MATS motto: "We Deliver Anything Anywhere."

After virtually conquering the spread of tuberculosis from cow to man, European medicine finds itself with a new twist: an outbreak of tuberculosis in cattle apparently stems from patients with tuberculosis spitting on pasture grass.

Over a period of seven months at Johns Hopkins Hospital, nurses were involved in 143 medication errors and 35 near errors.

Capsule Clinics

- Nipple discharge in the absence of a palpable breast mass should be held suspect as indicating either a precancerous lesion or cancer. Copeland, M., and Higgins, T. G., Ann. Surg. **151**:638, 1960.
- Of 4,292 infants receiving ophthalmia neonatorum prophylaxis, 10 per cent developed reactions to silver nitrate, compared to 4 per cent of those receiving Ilotycin ophthalmic ointment. Christian, J. R., J. Pediat. **57**:55, 1960.
- Experiments with dogs show that only 26 per cent of normal cardiac output is obtained by massage. Hepps, S. A., and Kissen, A. T., Am. J. Surg. **100**:64, 1960.
- To many patients a physical examination is an erotic experience and in some instances it represents sexual molestation. Discretion is necessary even though the patient and the doctor may be of the same sex. Schiffer, I., Canad. M. A. J. **82**:1322, 1960.

From Clinical Clippings, the Francis Roberts Agency, Inc.

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WASHINGTON

Physicians in Congress

Congratulations are in order for physicians who won places in Congress in the November 8 election.

Durward G. Hall, M.D., Springfield, Republican, was elected to Congress from the Seventh Missouri Congressional District. Dr. Hall had a majority of about 15,000 votes over the incumbent, Charles Brown, of Springfield.

Around the country, the following doctors of medicine were elected in their races for Congress of the United States:

Walter H. Judd, M.D., veteran Minnesota Republican, was reelected.

Ivor D. Fenton, M.D., Republican of Pennsylvania, was reelected.

Thomas E. Morgan, M.D., Democrat of Pennsylvania was reelected.

Dale Alford, M.D., Democrat of Arkansas, was reelected.

Early returns indicated that Edwin R. Durno, M.D., Republican, Oregon, might win his race.

Physicians who were defeated in their bid for a place in the Congress were Fred A. Obley, M.D., Democrat, Pennsylvania; John D. Kaster, M.D., Democrat, California, and Floyd M. Burgeson, Republican, Iowa.

Would Broaden Blue Cross

The *Medical World News* reported in the November 4 issue an interview with Dr. Basil McLean, former Blue Cross Association president. Dr. McLean urges that "the Blue Cross plans cover all hospital services whether they be for inpatients, *outpatients or patients released to their homes for follow-up treatment by hospital teams.*"

Harper's Criticized

An editorial in the same issue of *Medical World News* by Dr. Morris Fishbein takes *Harper's* magazine to task over its special supplement entitled "The Crisis in American Medicine," which appeared in the October issue of *Harper's*. Dr. Fishbein comments "What American medicine needs is not the creation of more dissatisfaction, as seems to be the task to which the editor of *Harper's* has set himself. What is needed is an honest, unbiased, unprejudiced survey of just what needs are not being satisfied and then finding some means to take care of the situation without destroying those factors in American medical practice that have made it, what the editor of *Harper's* frankly admits, 'the best in the world.'"

FDA Reported Not Lax

A private advisory group, formed as a result of charges aired before the Senate Antitrust Subcommittee investigating the drug industry, has reported that it found "no evidence of disregard for the public health" and that "appropriate action had been taken when hazards were established by subsequent clinical experience" by the Food and Drug Administration.

In addition to rejecting the charge against the Food and Drug Administration, the committee made 11 recommendations for strengthening federal inspection of drugs, including a controversial proposal to give the agency power to test the efficacy as well as safety of new drugs. Critics of this proposal have argued that therapeutic responsibility would be transferred from the physician to the federal government.

Insurance and the Elder Citizen

The Health Insurance Institute reports that at the close of 1959, 51 insurance companies were issuing policies guaranteed renewable for the lifetime of the insured, one company offered a policy guaranteed renewable to age 70 and another company offered one renewable to age 75.

Three fifths of the companies issued policies to persons 65 or older. Twenty-seven of these companies have a maximum issue age of 75 or older, ten place no specified limit on issue age, and the other 22 have top issue ages ranging from 55 to 64.

Approximately three fourths of the companies have a maximum daily hospital room and board benefit of $20.00 or more. Thirty-six companies offer a maximum hospital stay of 120 days and 61 per cent of the companies offer a policy with a maximum surgical schedule of $400.00 or more.

stiffness and pain

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(as reported in J.A.M.A., April 30, 1960)

"Particularly gratifying was the drug's [SOMA's] ability to relax muscular spasm, relieve pain, and restore normal movement . . . Its prompt action, ability to provide objective and subjective assistance, and freedom from undesirable effects recommend it for use as a muscle relaxant and analgesic drug of great benefit in the conservative management of the 'low back syndrome'."

Kestler, O.: Conservative Management of "Low Back Syndrome", J.A.M.A. 172: 2039 (April 30) 1960.

FASTER IMPROVEMENT—79% complete or marked improvement in 7 days (Kestler)

EASY TO USE—Usual adult dose is one 350 mg. tablet three times daily and at bedtime.

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Literature and samples on request.

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Across
Missouri

Health Care for the Aged

It is estimated that Missouri will receive a small increase (apparently between $8,000 and $9,000 per month) in federal funds as a result of the recent federal legislation for the health care of the aged. The additional money will probably be used to increase payments to hospitals. At present the hospitals are receiving about one half of their per diem costs.

The program which was passed by the curtailed postconvention session of Congress has two facets: (1) provides federal matching funds for persons already on public assistance rolls over 65 years of age, and (2) matching funds will be provided to states for the near needy persons, 65 years or older. The federal government is offering states liberal matching funds to provide health care for needy and near-needy persons 65 years of age and older. The program has A.M.A. approval.

Missouri is among states that would require enabling legislation before the program could be placed in effect. Two states, Michigan and Kentucky, voted to participate in the new voluntary federal-state medical care program for older persons at special sessions of their legislatures.

A report on the legislation was presented to the Council at its September meeting by Mr. James W. Foristel of the A.M.A. Washington office, and further discussion is scheduled for the next meeting of the Council.

Hospital Growth in Missouri

Among new hospitals, new additions to hospitals and plans for hospitals or additions to present hospitals in Missouri include a new addition to the Bothwell Hospital, Sedalia; Carroll County Hospital, under construction; contract recently let for a hospital at Sullivan; Stoddard County Hospital at Dexter; Bates County Hospital recently opened, as well as hospitals at Sweet Springs, and at Fredericktown; and hospitals soon to be open are Ripley County, Doniphan, and the Cedar County Hospital.

Bids have been let for a new hospital at Smithville, and plans are going ahead with the Howard County Hospital at Fayette, and the Johnson County Hospital at Warrensburg. Additions to hospitals have been completed in Monett, Hannibal, St. Joseph, Phelps County and Sikeston.

Preceptorship Program

Thirteen students from the senior class of the University of Missouri School of Medicine this year have elected to take advantage of the preceptorship program, which gives them six weeks experience with a physician in rural practice. Two students are with preceptors at the present time, or have just completed their time, and others will start on December 3. The program will continue through May 25, 1961.

Prior to this year there have been 44 physicians in the state who have taken students for the six weeks periods.

Most medical graduates go into internship immediately after graduation, or into military service, and thus the time of beginning practice is often delayed several years. However, since January 1, 1960, four doctors from the class of 1957 and one from the class of 1959 have begun practice in rural areas of Missouri.

Infectious Disease in Missouri

Ordinarily it is considered desirable to be among the top ten in any category, but Missouri has the distinction of not being among the top ten in incidence of infectious disease in 1959, 1960 or in the preceding five year period. In the October issue of *Patterns of Disease*, figures for infectious disease incidence are given for all states, with the ten having the highest indicated. The figures for Missouri in the diseases reported showing the number of new cases, the total for the year to date and the total at the same time last year are poliomyelitis 5, 15, 318; meningococcal infections 2, 21, 23; diphtheria 0, 2, 4; whooping cough 0, 0, 344; scarlet fever 152, 880, 953; hepatitis 51, 688, 338.

CLINICAL REMISSION
N A "PROBLEM" ARTHRITIC

n rheumatoid arthritis with diabetes mellitus. A 54-year-old diabetic ith a four-year history of arthritis was started on DECADRON, 0.75 mg./ lay, to control severe symptoms. After a year of therapy with 0.5 to .5 mg. daily doses of DECADRON, she has had no side effects and dia- etes has not been exacerbated. She is in clinical remission.*

ew convenient b.i.d. alternate dosage schedule: the degree and extent of relief provided by ECADRON allows for b.i.d. maintenance dosage in many patients with so-called "chronic" condi- ons. Acute manifestations should first be brought under control with a t.i.d. or q.i.d. schedule.

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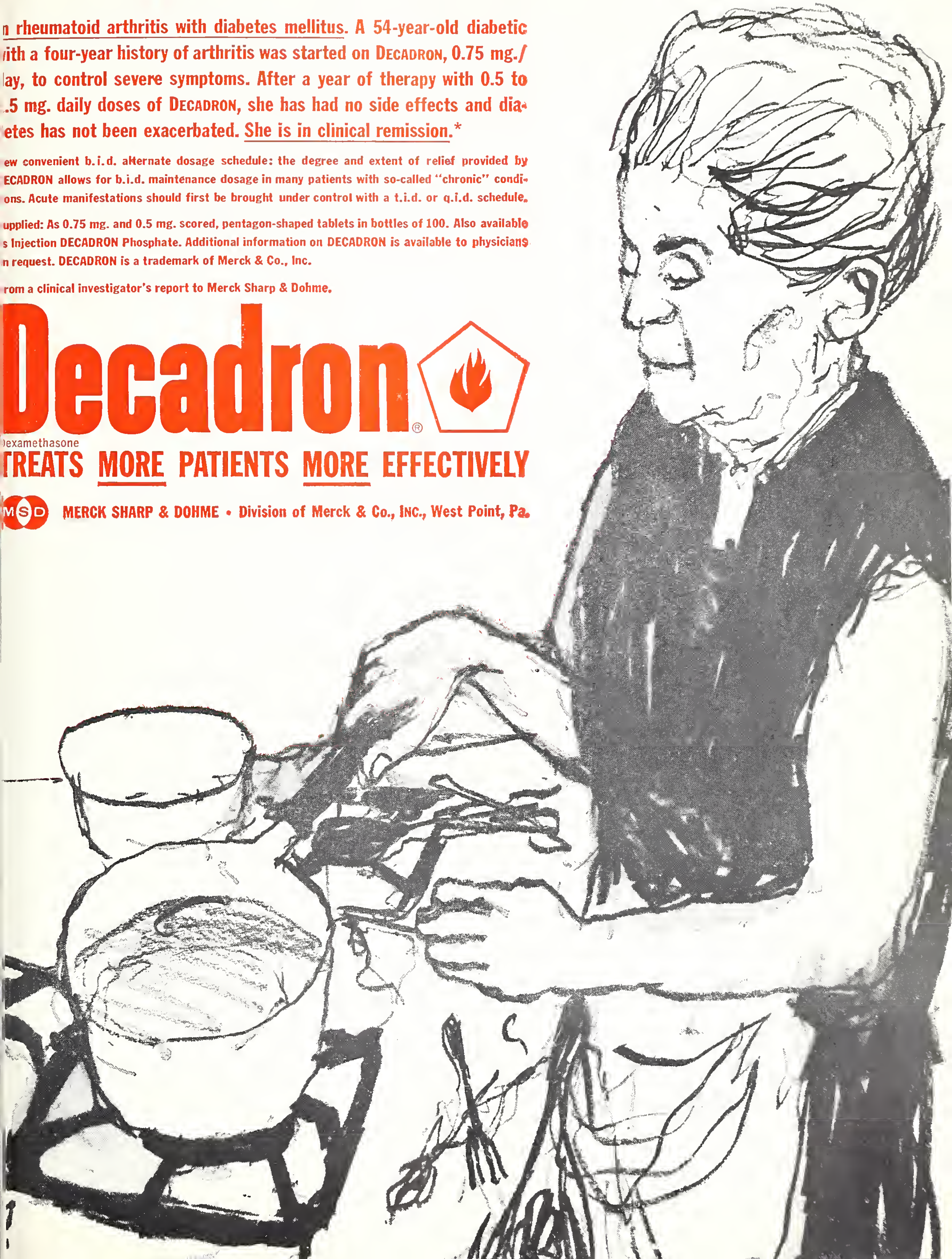

Woman's Auxiliary

Now, in these shortest days of the whole year, when we hurry home in the late afternoon from shopping or from a visit with friends, we see that the lamps in the houses we pass have already been lighted. Very soon, during the week when the days are shortest of all, we shall bring green trees into our homes and cover them with lights; and we shall hang wreaths of holly on our doors and decorate the mantels. This is woman's work—to deck the halls.

Mrs. Jordan Kelling

The work of a doctor's wife, like that of any wife, centers in her home, her husband and her children. Immediately beyond her door, crowding into the home and becoming a part of it, are her church, the school and the friends of all members of the family. There is also the medical profession.

Home, husband, children; church, school, friends and the medical profession—are there things more important to the physician's wife? No matter how sophisticated we may be, we are still like mother hens, protecting all we hold dear.

We wives are not doctors, but we are wedded to the medical profession, for better or for worse, because these men we love will be doctors, come what may. Or, we might paraphrase Tennyson and say, "We women may come and we women may go, but our men will go on as doctors forever."

We are married to the ideals our doctors cherish in their practice of medicine. We are married to the distress in their lives caused by the lack of enough trained help in fields related to their profession. We are wedded to the righteous anger they feel when confronted by suffering and death caused by avoidable accidents on the highway or in the home, or by the deliberate deception of innocent people by unscrupulous charlatans. We are partners for life in the struggle for progress in treating diseases through research and training.

All this explains why a woman wedded to the medical profession is thoroughly interested in the Woman's Auxiliary to the American Medical Association, and in her state and county Auxiliaries. Here is her reason for being unable to resist recruiting bright young people to enter some form of health career. This is why she is not apathetic in the effort to preserve and enhance the heritage of American Medicine, and why she proudly and persistently supports our medical schools financially through the American Medical Education Foundation.

Christmas is a time for giving, but the Auxiliary is busy giving all the year long—giving in the mental health field to help those whom Dr. William Menninger has described as "folks in trouble." We are busy helping young medical students through our Medical Student Loan Fund, busy giving help to the medical schools through AMEF, and busy giving education to ourselves and our communities in the ways of safety, preparation of our homes for Civil Defense, and better community health. And, we are busy giving the full measure of our endeavor to protect the precious rights of our doctors and their patients in their highly personal and confidential relationships so that the art of healing can be practiced forever free from destructive meddling by outside authority.

The Chicago Conference for State Presidents and Presidents-elect, held early in October was rich in inspiration, and has been ably reported by our President-elect, Mrs. Frederick E. Wade, in the December *Quarterly Bulletin.* At the State Woman's Activities Civil Defense conference, held in mid-October in Jefferson City, the Dorothy Calvin Award for outstanding work done by a state organization was presented for the first time. Your President is proud to report that the Woman's Auxiliary to the Missouri State Medical Association was given honorable mention, along with the Missouri Federation of Business and Professional Women's Clubs, when the award was made to the American Legion Auxiliary.

We have had a wonderful time going visiting to the Marion-Ralls-Shelby Auxiliary in Hannibal, to Grand River Auxiliary in Chillicothe, and to Springfield to meet with Greene County. All

(Continued on page 1504)

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J. M. MARTT, M.D., *and* MONROE PAINTER, M.D., *Columbia*

Congenital Subvalvular Aortic Stenosis

Contradictory evidence exists as to the incidence of subvalvular aortic stenosis. Knowledge of the location of the stenosis is important since not all methods of surgical therapy are designed to cope with the subvalvular lesion. The experience of several large medical centers concerned with the surgical correction of these defects has been tabulated in an effort to determine the incidence of this lesion. In addition, a review has been made of the laboratory and clinical methods employed in the detection of subvalvular aortic stenosis.

Congenital aortic stenosis is a relatively common congenital cardiac anomaly, and the subvalvular location probably accounts for approximately one fourth of all patients with this defect. No completely reliable technic is available for the preoperative localization of the defect.

Dr. Martt is Associate Professor of Medicine, University of Missouri School of Medicine, Columbia, and Dr. Painter received his M.D. degree from the University of Missouri School of Medicine in 1959 and is now in military service.

CONGENITAL AORTIC stenosis is generally considered to be an uncommon cardiac anomaly,[1, 2, 3] but the experience in the University Hospital as well as in others would suggest that it is relatively common.[2, 4, 5] We have observed seven patients with this defect in the last two years in our study of approximately 125 patients with congenital heart disease, representing an incidence of 5.5 per cent. Patients with this lesion are prone to sudden death, often at an early age. In an eight-year follow-up study of 73 patients, 8 per cent had died suddenly and unexpectedly.[6] Since the defect tends to be an isolated one and is remediable by modern surgical technics, it is most important that it be detected in the young child and proper steps taken to evaluate the severity of the obstruction and to plan the optimal time for surgical correction. Further, it is desirable that the precise location of the stenosis be determined (namely, valvular or subvalvular) if these patients are to be properly selected for surgery since not all surgical techincs for the treatment of congenital aortic stenosis are designed to cope with the subvalvular type of obstruction.[7]

The incidence of subvalvular (subaortic, infundibular) aortic stenosis as related to valvular stenosis is not clear, and this study was carried out in part in an effort to clarify such relationship. Our recent failure to suspect a subvalvular location as the site of obstruction in a young patient with congenital aortic stenosis led to inadequate surgical management and, eventually, to the patient's death. Therefore, the available diagnostic technics were reviewed to ascertain whether the precise location can be safely and accurately determined prior to surgical intervention.

HISTORY

Subvalvular aortic stenosis was first described by Chevers in 1832.[8] Keith, in 1924, attributed it to an arrest of the bulbus cordis, and this is generally accepted today as the most plausible explanation for its development.[9] Pathologically, subvalvular aortic stenosis appears as a fibrous ridge or valve of tissue just inferior to the aortic valve, extending 1 to 10 mm. into the ventricular cavity (fig. 1). Histologically, it is composed of elastic and hyalinized connective tissue covered by endothelium.

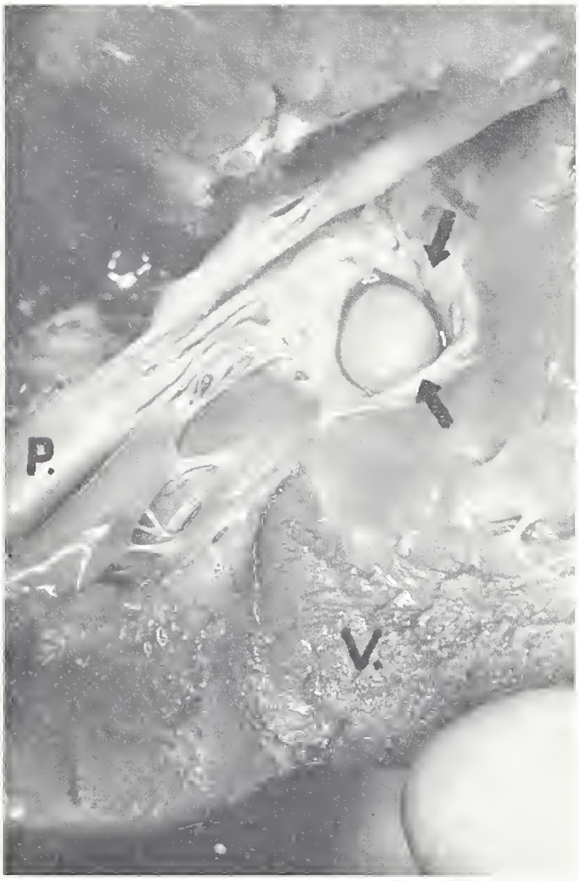

Fig. 1. Subvalvular Aortic Stenosis. View from left ventricle. Index finger tip in stenotic outflow tract. Arrows designate fibrous ring of subvalvular stenosis. (P = papillary muscle. V = left ventricle, cut surface).

INCIDENCE

Abbott, in a study of 1,000 autopsies performed on patients with congenital heart defects, reported subvalvular aortic stenosis in 12 instances and valvular aortic stenosis in 11, thus finding the incidence of the subvalvular type to be as common as the valvular.[10] Taussig[11] and Wood,[12] in separate monographs on congenital heart disease, both referred to subvalvular aortic stenosis as being the more common. Morrow[5] found subvalvular aortic stenosis in 38 per cent of 21 patients with congenital aortic stenosis. The experience of several large medical centers was obtained by personal correspondence and the data recorded in table 1. The incidence of subvalvular stenosis was found to vary from 10 to 38 per cent.[13, 14, 15, 16] In one extensive experience based on a survey of 7,650 autopsies at a large children's hospital it was found that subvalvular aortic stenosis was a rare congenital anomaly, "probably one of the rarest." By comparison, valvular aortic stenosis was found with considerable frequency.[3]

The true incidence of subvalvular aortic stenosis as related to valvular aortic stenosis is, therefore, unclear at the present time.

PHYSICAL EXAMINATION

Murmur.—The characteristic harsh systolic murmur heard in the second right intercostal space and transmitted to the great vessels of the neck is present in both types of defects and does not enable one to differentiate the location.[2, 3, 17] The phonocardiogram in each type reveals a "diamond-shaped" murmur with a normal or diminished second sound at the aortic area (fig. 2). An associated aortic diastolic murmur is not uncommon and has been thought to indicate val-

TABLE 1

INCIDENCE OF CONGENITAL SUBVALVULAR AORTIC STENOSIS

	Total Operated Cases of Congenital A.S.	*Subvalvular*	*Valvular*	*Valvular and Subvalvular*
Morrow[5]	21	9 (38%)	12 (62%)	0
Lillehei[13]	16	3 (19%)	13 (81%)	0
Downing[14]	38	4 (10%)	34 (90%)	0
Bailey Clinic[14]	21	7 (33%)	14 (67%)	0
Blount[15]	36	6 (16.5%)	30 (83.5%)	0
Cooley[16]	32	9 (28%)	19 (59%)	3 (13%)
Totals	164	38 (23%)	122 (74%)	3 (2%)

vular stenosis.[18] However, Morrow *et al.* observed a diastolic murmur of aortic insufficiency in one half of their patients with subvalvular stenosis, whereas only one third of those with valvular stenosis had such a murmur.[5] Others have likewise found an aortic diastolic murmur commonly with subvalvular lesions.[17]

Aortic Closure Sound.—Although a diminished aortic closure sound has been emphasized as a diagnostic sign in valvular aortic stenosis, it is now known that at least one third of the patients with this anomaly have a normal second heart sound (fig. 2). With subvalvular aortic stenosis the second sound theoretically should be of normal intensity. Instances of valvular and subvalvular stenosis have been described with a normal, increased or decreased second heart sound.[2, 5, 17]

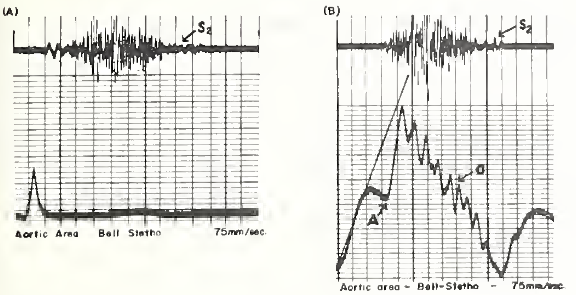

Fig. 2. (A) Phonocardiogram (M.T., 7 W♂). Subvalvular Aortic Stenosis. Diamond-shaped systolic murmur with diminished aortic closure sound (S_2). (B) Phonocardiogram and Carotid Artery Sphygmogram (C.T., 11 W♀). Valvular Aortic Stenosis. Diamond-shaped systolic murmur and diminished aortic closure sound. Note the prominent anacrotic notch on carotid tracing A, and the multiphasic notching, C; the latter represents transmission of murmur to neck.

Blood Pressure and Pulse.— The characteristic plateau pulse of aortic stenosis is a manifestation of the severity of the obstructive process rather than of its location, and is of no aid in differentiation. The blood pressure may show a narrow pulse pressure in severe aortic stenosis, however there is no evidence that this pressure alteration can be correlated in any way with the location of the stenosis.

Laboratory Studies (Arterial Pressure Curves).—Careful analysis of peripheral and central arterial pressure curves has been suggested as a means of distinguishing the site of aortic stenosis.[19] Valvular stenosis may lack the sharp dicrotic notch seen in the normal curve, and the fall of the descending limb of the curve may be slower than normal, whereas in patients with the subvalvular stenosis, the fall of the descending limb is more rapid and may contain a sharp incisura. These findings have not met with general agreement.[2, 4, 20] An illustration of arterial pressure curves demonstrating the opposite effects is shown in figure 3.

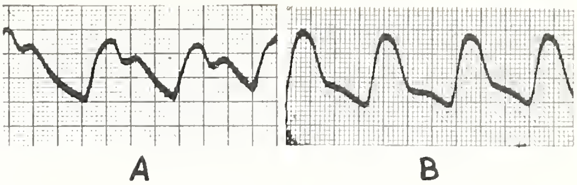

Fig. 3. Brachial artery pressure curves of two patients with congenital aortic stenosis. (A) Valvular Stenosis (11 W♀). Note well-defined incisura. (B) Subvalvular Stenosis (8 W♂). Note poorly-defined incisura. (See text.)

Electrocardiogram.—Metianu *et al.*[21] have attempted to correlate the electrocardiographic findings with the location of the obstructive process by their observations of a more marked degree of left ventricular hypertrophy in patients with subvalvular stenosis. It was their feeling that a left ventricular hypertrophy pattern when seen with subaortic stenosis is of a specific type, which they called hypertrophy "du barrage." Their findings have not been described by others and remain to be confirmed. It would seem logical that the degree of the left ventricular hypertrophy pattern in the electrocardiogram would correlate directly with the severity of the obstructive process rather than its location.

Roentgenogram.—Characteristic changes in the chest x-ray are seen in both valvular and subvalvular stenosis. These features consist of poststenotic dilatation of the ascending aorta and left ventricular hypertrophy. The left atrium may be enlarged in a small per cent of cases. These x-ray abnormalities are not invariably present and vary directly with the severity of the obstruction. Blount has observed that the location of the poststenotic dilatation is maximal at the sinuses of Valsalva in subvalvular aortic stenosis, whereas in valvular obstruction it occurs at a

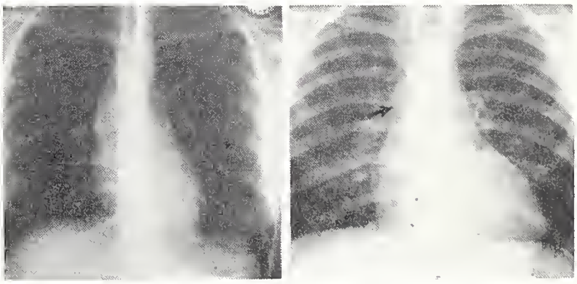

Fig. 4. A-P chest x-rays. (A) Valvular Aortic Stenosis (14 W♀). Note pronounced dilatation of ascending aorta. (B) Subvalvular Aortic Stenosis (7 W♂). Poststenotic dilatation of aorta evident but of less degree than in (A).

somewhat higher level (fig. 4).[16, 22] Most authors have not described in detail the site of dilatation in the ascending aorta, and this point deserves further observation.

Valvular calcification has been suggested as indicative of valvular stenosis.[1, 18] This is of little help in younger patients although calcification has been observed in a patient 18 years of age.[1] However, calcification has been seen in subvalvular stenosis; thus, this finding is not a reliable differentiating point.[23]

Angiocardiography.—Subvalvular aortic stenosis has been visualized by angiocardiogram.[24] Selective angiocardiography with injection into the left ventricle would seem an effective means of visualizing the nature of the obstruction, and has been employed in some laboratories. More study of this approach to the diagnosis is probably justified.[25]

Left Heart Catheterization.—Withdrawal pressure curves across the aortic valve performed at the time of surgery or by percutaneous left ventricular puncture preoperatively have been employed successfully in differentiating these two lesions. This procedure is probably the most reliable and successful means of detecting the subvalvular lesion. However, withdrawal pressure curves through the small infundibular area may miss the characteristic gradient because of too rapid transit of the catheter or because of ventricular arrhythmia resulting from the presence of the catheter in the left ventricle.[17, 26, 27]

DISCUSSION

The exact incidence of subvalvular aortic stenosis remains to be elucidated. It is probably present in from one fourth to one third of cases of congenital aortic stenosis. It is extremely difficult to differentiate valvular from subvalvular aortic stenosis by the usual technics employed in the cardiac laboratory. Continuous recording of withdrawal pressure curves across the aortic valve would seem to be the most reliable method available, yet this technic may yield indefinite findings.

Inasmuch as the clinician may be unable to locate precisely the site of the stenosis, and in view of the high incidence of the subvalvular type, it would seem desirable to employ a surgical approach that could deal adequately with either type of stenosis; i.e., an "open-heart" procedure with use of the pump-oxygenator. As mentioned previously, some surgical technics for the correction of aortic stenosis do not enable the surgeon to visualize the obstruction and, consequently, the subvalvular type may easily be overlooked.

SUMMARY

Congenital aortic stenosis is a relatively common congenital cardiac anomaly (5.5 per cent in our series).

Subvalvular aortic stenosis accounts for approximately one fourth of the patients with this defect.

Accurate preoperative determination of the location of the obstruction is difficult, and no completely reliable technic is available. However, withdrawal pressure curves across the aortic valve obtained by left heart catheterization is probably the most accurate means.

Utilization of the pump-oxygenator with direct vision surgery should obviate any absolute necessity of precise localization of the lesion.

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Use, Abuse and Limitations Of Griseofulvin

The use and results of the use of Griseofulvin, an antifungal drug, are pointed out, giving its propensities and the necessity of correct diagnosis in its use.

Griseofulvin, the antifungal drug, is a fermentation product of Penicillium griseofulvin whereas penicillin, the antibacterial drug is derived from Penicillium notatum. It was first isolated in 1939 and was used as an antifungal agent in agriculture. It was almost 20 years before J. C. Gentles published results of its use in superficial fungus infections of guinea pigs. Harvey Blank was the first to treat a patient in this country and made his preliminary report at the meeting of the American Academy of Dermatology in December, 1958. The report was warmly received because the drug seemed to be a real breakthrough in the fight against the superficial fungi. It was not a life-saving drug as penicillin had been two decades before because the dermatophytes are not killers as are the bacteria. Dermatophytes are, however, the cause of untold human misery and unhappiness because of the abhorrence society holds for visible disease. At times it is a disabling disease.

Any list of "the most common skin diseases" finds the superficial fungus infections or dermatophytoses in a prominent position. The term superficial is well taken because the organism is confined to the dead keratin layer of the hair, nails and skin. It would seem that the organism should, therefore, be an easy victim of antifungal agents; nothing is farther from the truth and this is evidenced by the innumerable preparations available on prescription or over the counter. Their very multiplicity is mute evidence of their ineffectiveness. Whitfield's original preparation of salicylic acid and benzoic acid remains one of the most potent medicaments more than 50 years after it was first compounded. There has been no shortage of chemical agents with marked fungistatic or fungicidal properties when tested in vitro; the problem has been how to get these agents to the fungi. The available vehicles have not been able to adequately penetrate the keratin.

The management of acute vesicular eruptions and benign superficial infections has never been too much of a problem because they respond to conservative measures such as wet packs and the available topical agents.

It has long been observed that tinea capitas which developed inflammatory kerion either spontaneously, or because of irritating local medications, would heal with conservative measures. The real therapeutic problems have been the noninflammatory hair and nail involvement and the chronic involvement of glabrous skin due to Trichophyton rubrum. There has probably never been a more unrewarding or frustrating task in medicine than the attempt to treat tinea of the nails. Noninflammatory tinea of the scalp required months of treatment with the available ointments and the fungi seemed to die a slow death from smothering rather than from any specific actions of the chemicals. The more resistant cases, especially those due to the human type Microsporon audouini, finally required x-ray epilation to rid the scalp of infected hair. This was a barbarous practice and the little girl with a scalp as devoid of hair as a billiard ball was a pitiful sight until the hair regrew. Fortunately, the only damage suffered was to the psychi, because epilation properly performed by a skilled technician was a safe procedure and the hair always regrew within several months.

Experience with griseofulvin during the last two years holds promise of changing frustration to pleasure in the treatment of some of these conditions. At least it fulfills the patient's demand "to get to the bottom of the condition" since the drug is actually deposited in the bottom layers of the hair, skin and nails and works its way to the surface.

Our results were in agreement with already published reports. All of our cases of tinea capitas were due to either Microsporon audouini or M. canis. All were treated with 0.25 gm. twice daily, regardless of age or weight, for one month. They were instructed to shampoo two or three times weekly and the involved areas were clipped or shaved at three weeks, by which time the fluorescence had grown up well out of the follicle. All were observed for recurrent fluorescence with Wood's light for a month after treatment was stopped. There were no recurrences. Cases showing inflammatory kerion reaction used compresses of potassium permanganate in addition to the oral medication.

Tinea of the nails, whether due to Trichophyton rubrum or T. mentagrophytes, improved at the same rate of 1 to 1.5 mm. every two weeks. Treatment was continued from four to six months. The usual dosage was 0.5 gm. twice daily; many were reduced to 0.75 gm. daily dosage after six to eight weeks. The rate of healthy nail growth remained the same on the reduced dose. One case showed definite regression of one nail after an initial period of improvement even though the other nails continued to improve on the full dosage schedule. Another case showed regression of all ten nails after having improved over a period of three months. Regression continued even after the dose was doubled over a period of three months and treatment finally was abandoned. Toenails, although improved, regrew at a markedly slower rate.

Tinea of palms, soles and groin were all clinically clear in three to four weeks; symptoms of itching, dryness and fissuring were relieved within two weeks. One patient on long term therapy because of T. rubrum infection of the nails still had positive scrapings from the groin after four and one half months, even though he was clinically well. Acute vesicular lesions of the soles due to T. mentagrophytes were benefited but not as strikingly as the dry scaling of T. rubrum.

The classical ringworm lesions of glabrous skin in children and adults due to species other than T. rubrum responded well and were clear in two to three weeks.

Our experience with griseofulvin has confirmed the findings of others that the drug is relatively nontoxic; however, the same precautions should be taken as with any new drug. Urines were checked routinely with negative findings. One patient presented a coffee colored specimen after three days of therapy; however, further checking revealed he was on unsupervised anticoagulant therapy. White blood counts were done initially and at intervals of several weeks. No decreased counts were observed but have been reported by other investigators.[1] Headache was probably the most common complaint but disappeared after several days, even though the drug was continued. In only a few cases was it severe enough to require stopping the drug. Gas, bloating and mild diarrhea were reported by some. Fatigue was reported by two. One adult male had decreased tolerance to alcohol and emotional instability manifested by crying and nervousness so severe that the drug was stopped. An attempt to reintroduce the drug two weeks later resulted in reappearance of symptoms. The fear of interference with spermatogenesis has been laid to rest by MacLeod.[2]

One acute case of moniliasis of the ano-genital area occurred while the patient was on long term therapy. One case that looked like a typical tinea cruris was started on therapy even though mycelia could not be demonstrated in the scrapings. Within a few days the condition was much worse and scrapings at that time were loaded with the mycelia and spores of Candida albicans. One case of tinea pedis was also suffering from acute urticaria of two weeks duration following an injection of penicillin. The urticaria stopped within a week and the feet were clinically well in two weeks after 0.5 gm. griseofulvin was given twice daily. One case developed severe urticaria which cleared promptly when the drug was stopped. Several patients known to be sensitive to penicillin were treated with the drug without sequelae.

Griseofulvin is an effective drug for the treatment of superficial fungus infections. The abuse of this drug lies in faulty or inaccurate diagnosis. In the past an undue number of itching, scaling, chronic skin diseases have been almost gleefully grouped under the diagnosis "fungus." This classification has become almost as much a wastebasket as "eczema." It is comparable to the way a multitude of undiagnosable aches and pains have been solemnly classified as "a virus." It must be remembered that dermatitis of hands and feet, nail lesions, ano-genital pruritus, ear canal troubles and scalp diseases can and often do have a different etiology than infection with fungi. Dermatitis occurring on the tops of the feet is almost never due to fungi but to allergy to dye, leather or rubber cement. Pityriasis rosea, although it resembles multiple ringworms, is not due to fungi. Alopecia areata can and must be differentiated from tinea capitas. Psoriatic nails will not be benefited by griseofulvin and the body lesions may even be precipitated into a state of exfoliative dermatitis. Yeast infections are not only not helped but often made much worse by the drug. Tinea versicolor caused by

Microsporon furfur does not respond to the drug.

Diagnosis by inspection alone is subject to a high percentage of error even by the most skilled dermatologist. Theoretically, culture on Sabouraud's media would be the ideal procedure. It confirms the diagnosis, identifies the species and therefore gives some insight as to the prognosis. Practically, culture is not of much value to the doctor without special training in mycology because a contaminant may be regarded as a pathogen. In addition, the seven to ten days wait for a culture to grow is time wasted. The cost and inconvenience of keeping fresh media and tubes on hand is to be considered when there is not frequent occasion to use them.

The direct microscopic examination of a potassium hydroxide preparation of scrapings is by far the simplest, quickest and most reliable diagnostic procedure. The use of the ink dye technic makes it even simpler for one not skilled at examining the plain preparation. A definite diagnosis can be established in the matter of a few minutes in most cases. Candida albicans can readily be differentiated from true fungi by this method. This is of the greatest importance because yeast attacks nails and intertriginous areas just as do the fungi and can resemble them closely.

Unless a definite diagnosis is established this useful drug will gain a bad reputation with doctor and patient alike. The cost of this medication has dropped rapidly in price since it was first introduced but is still expensive enough to entitle the patient to an accurate diagnosis before embarking on a prolonged course of treatment.

Specifics in medicine are a rarity but griseofulvin seems to fall into that classification. It is certainly as close to a specific for the superficial fungi as one could hope for at this time. A specific must cure and the term cure is not one to be used loosely. There seems little doubt but that tinea capitas is actually cured but it will take more time to evaluate the final results in tinea of the nails and generalized T. rubrum infections of the skin. It may turn out as Wilson has suggested, that these conditions are only controlled as diabetes is controlled by insulin.[3] Persons susceptible to these infections may have to take maintenance dosage or repeated short courses from time to time to remain free of disease. It has long been apparent that these persons are different in some way and this difference is probably on an immunologic basis. Variations in localized tissue immunity would certainly explain why one palm will be involved for years without the other becoming infected, or one fingernail can be completely destroyed while the adjacent nail remains healthy. One member of a family might have widespread disease and no other member be infected, or, there might be numerous others of the family affected. It is certainly obvious that there is more involved in contracting a fungus disease than merely being exposed to the organism. There are dermatologists who have tinea of the nails but if casual or repeated exposure was the only factor involved all would have it. This is confirmed by Witten's and Sulzberger's[4] difficulty in accomplishing experimental infections. Further studies in the immunology will be required to furnish the answer.

Eighteen months' experience with griseofulvin has left us with some definite impressions and some not so definite. Some of our enthusiasm has been borne out.

Tinea capitas seems to be the prime indication for the drug, regardless of the causative species. A difficult problem is now controllable.

Nail infections usually respond but require prolonged treatment. Relapses and failure to respond may be due to unknown immunologic factors. Toenail infections respond so slowly it is doubtful if they are an indication for therapy if they are the only site of involvement. Most patients will not continue therapy long enough to obtain cure. Avulsion of the nails might help speed response but we have not tried this.

Wide spread T. rubrum infections of glabrous skin, palms and soles respond but appear to require prolonged or intermittent therapy to prevent relapse. The same factors affecting nail relapse probably are involved here.

Tinea pedis and cruris respond, but it is still frustrating. Topical medication is still frequently required. Symptoms such as itching are relieved promptly when the drug is used and it must be considered a useful adjunct.

Ordinary ringworm lesions of glabrous skin in children and adults respond to one to two weeks therapy. They respond just as well or better to the topical drugs such as Whitfield's ointment, ammoniated mercury or the undecylenic acids. Because of this it is doubtful if they constitute a valid indication for the drug.

Latapi[5] has reported success in treatment of sporotrichosis. It was necessary to fall back on the time proven potassium iodide in the three cases treated by us (CCD), which were confirmed by culture.

It is of the utmost importance that the physician know the indications for the drug, which

(Continued on page 1476)

The Management of Relapse in Tuberculosis

Tuberculosis Abstract

The management of patients who relapse after treatment for tuberculosis can be divided into two groups, one of which is relatively easy, the other often very difficult. The easy group is composed of patients who were treated, apparently successfully, without antituberculosis drugs. Every year a small number of these are found to have active disease. They should be handled exactly as first-treatment cases: with adequate rest, two drugs, and—if indicated—surgery. If the patient is a responsible graduate of an old-time tuberculosis hospital, it may not be necessary to keep him in a hospital for the entire duration of drug therapy. A preliminary hospital work-up is needed for complete evaluation. This should include radiologic and bronchoscopic study, pulmonary function tests, bacterial drug susceptibility determinations, and careful observation for untoward drug reactions. After this, if the home is adequate and if the patient is sufficiently intelligent and reliable, he can be treated on an outpatient basis. This does not mean that he can continue to work. To give a patient a bottle of pills and tell him to come back in 4 or 6 months, is not tuberculosis treatment.

Tuberculosis patients who have had chemotherapy in the past are more difficult to treat if relapse occurs than are those who were treated without drugs. Drugs combined with modified bed rest should be used in all cases. Effective first treatment is the best defense against relapse.

The abstract is furnished by the National Tuberculosis Association and is from an article by Robert V. Cohen, M.D., which appeared in *Philadelphia Medicine*, January 15, 1960.

Patients with much fibrosis or those who have had pneumothorax or thoracoplasty may have greatly reduced pulmonary function. Surgical measures should be undertaken only after careful assessment of pulmonary function. Older patients who improve and turn negative on chemotherapy should be maintained on drugs for a long, long time. The most extensive the original lesion or the older the patient, the longer the drug regimen. Drugs can be taken "For Life" in the treatment of tuberculosis, just as in the treatment of diabetes, pernicious anemia, epilepsy, and other diseases.

Relapse After Chemotherapy

By far the larger and more difficult group of patients seen in relapse today are those who have had chemotherapy in the past. The great majority of these unfortunate situations arise because someone has broken one of the three fundamental commandments of chemotherapy:

I. Thou shalt not stop first-treatment drugs too soon.

II. Thou shalt not interrupt treatment.

III. Thou shalt not use up thy best drugs in the first round.

A patient who has active tuberculosis after "adequate" drug treatment is in a very tough spot indeed.

The initial work-up should include, in addition to the items mentioned above, a meticulous history of drug treatment, dosage, and duration. Tests of bacterial susceptibility to drugs are mandatory. By and large, test-tube resistance to streptomycin parallels clinical resistance. Giving more streptomycin in such situations can cause toxic reactions but do no good. In first-treatment cases, resistance to isoniazid in the test tube does not always parallel the clinical situation; if the

(Continued on page 1531)

GRISEOFULVIN—Continued

are superficial fungus infections only. It is even more important that the diagnosis be correct. If these principles are observed griseofulvin fills a therapeutic void.

Griseofulvin (Fulvicin) used in this study was supplied by Schering Corporation.

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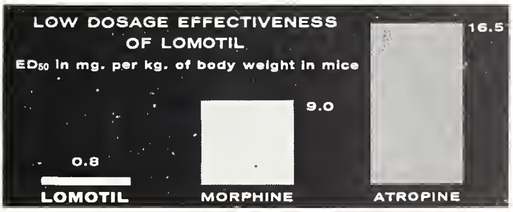

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Jefferson County Health Protection Survey

A Special Article

The plan for the survey conducted in Jefferson County basically for the purpose of promoting the maintenance of good health and establishment of desirable health attitudes and habits, as well as an estimate of the prevalence of chronic illness, was presented to and approved by the Council of the Association. The survey was also approved by the Jefferson County Medical Society and the local health department. The Division of Health had expressed the feeling that only with the full support of the Society and the practicing physicians in Jefferson County and the Jefferson County Health Department could the survey have been conducted.

Following conferences with the U. S. Public Health Service and a careful review of surveys in various parts of the country conducted by public health departments and previously conducted multiple screening programs, it was decided to set up a multiple screening program in a selected county in the State of Missouri to determine the prevalence of chronic illness in the given county. Jefferson County was selected for many reasons: It has a combination of rural, suburban and urban population; the county health department is outstanding in its direction, staff, facilities, program and acceptance by the county community; the county health department had indicated an interest in the survey; there are a fairly large number of competent physicians and dentists in the county, and the county population of 60,000 was considered to be neither too large nor too small to justify the survey.

Under the immediate supervision of C. W. Meinershagen, M.D., Director of the Bureau of Chronic Illness, Division of Health of Missouri, the Health Protection Survey had several objectives and goals, all of which were intended, either directly or indirectly, to promote the maintenance of good health and the establishment of desirable health attitudes and habits. The survey was conceived as a pilot project to improve the adult health of a given county and to ascertain the prevalence of chronic illness in that county. The specific goals to be accomplished were outlined as follow:

1. To accent the significance of chronic illness (a) to the general public, (b) to the medical groups and (c) to the health and welfare groups (both public and voluntary).
2. To find cases.
3. To motivate (a) the treatment of unknown cases and (b) the reinstatement to treatment of known cases.
4. To implant the idea or habit of periodic health check-ups.
5. To develop more interest by the general public in health needs, facilities, resources and programs of the health department.
6. To determine the efficacy and effectiveness of the multiple screening for specific diseases on a community (county) wide basis.

This data was compiled 18 months following the completion of the Health Protection Survey when 1,734 of 3,057 persons with suspected conditions had visited their physician to confirm or refute the findings of the survey.

Procedure

The specific conditions to be screened for were overweight, hypertension, visual acuity, glaucoma, hearing loss, heart and lung abnormalities determined by chest x-ray, cardiovascular disease, syphilis, anemia, brucellosis, diabetes and nephritis. A complete dental examination was made by a dentist. This did not include dental x-ray. The dental findings are not included in this report. A committee of the County Medical Society worked with the Health Department in establishing forms used and all policies and procedures followed. Along with pertinent medical history information supplied by the individual, results of the following tests were used to determine whether or not any of these conditions was suspected: 25 per cent overweight according to the Metropolitan Life Insurance height-weight tables; either systolic or diastolic blood pressure higher than 160/100; vision less than 20/40 for either eye (the test was done with glasses if the person usually wore glasses); intraocular pressure over 25 mm. Hg. for glaucoma; inability to hear a 2,000 cycle sound at 35 decibel intensity; any suspicious finding on a chest x-ray, any abnormal or suspicious finding on an electrocardiogram (Lead 1 only); any reaction of serologic test for syphilis and brucellosis; hemoglobin less than 11.2 gm. per cent for women and less than 12.3 gm. per cent for men;* blood sugar more than 130 mg. per cent by Wilkerson-Heftmann method; sugar in the urine 0.5 per cent or more by Uristix method, and albumin more than 30 mg. protein by Uristix method.

All county residents over 39 years of age were invited to take advantage of the free tests and examinations which were conducted in the Jefferson County Health Offices at Hillsboro, Missouri.

Although any detailed report of the efforts at community organization more properly belongs in a report of the effectiveness of the program in terms of health education, it is appropriate to outline briefly the manner in which the county was organized in order to carry out the mechanics of the clinic phase of the survey. Representatives of agricultural extension, educational, religious, industrial, labor, governmental, welfare, health, nursing home and voluntary health organizations were called together for the purpose of organizing a county-wide committee to act in a liaison capacity between the operation of the survey clinic and the public. Thus was established a Planning Board for the Health Protection Survey. This Planning Board accepted the responsibility for achieving three major objectives:

1. To promote the clinic phase of the screening program and to help in its operation.

2. To provide area organization for appointments and publicity. A Schioetz Tonometer was used.

3. To plan with the County Health Department on a long-range program for better control of chronic illness and, hopefully, to prevent or reduce some of the problems of the aging population.

The county was divided into 19 areas on the basis of the ten telephone exchanges and nine urban areas, and the Planning Board secured a chairman for each of these areas. The Board also helped to set up organized groups in various communities throughout the county. The area chairmen were oriented to the program and to the activities that their local community committees would undertake. They, in turn, selected people in their areas to function as public information chairman, appointment secretary, transportation chairman and volunteer recruitment chairman. The community committees were allotted times for appointments which they were expected to fill, thus placing the responsibility for maintaining a steady flow of people to be screened at the local community level.

The 19 area committees not only made appointments for people to be screened, and publicized the program locally, but they also recruited volunteers for work in the clinic. More than 200 volunteers provided more than 5,000 hours of service at the clinic during its four months of operation. The hours devoted at the local level in promoting the program by the various committee chairmen were countless. Such volunteer activity not only provided a needed service in the direct operation of the clinic, but also served to tie the total project closely to each community in the county.

Every effort was made to assure that the entire adult population of the county was made aware of the survey and the opportunity for the free tests and examinations. Five county newspapers and the radio station gave the program unlimited support. The newspapers carried weekly news items on the progress of the survey, and the radio station helped to produce a 30 minute panel program and made regular news item broadcasts. The *St. Louis Dispatch* sent two staff members to spend a full day observing the project in operation, interviewing people being screened, talking to the clinic personnel and taking pictures. They devoted almost a full page to the "over 39 health check-up." St. Louis radio stations made mention of the survey in their regular news broadcasts. Basic fact sheets concerning the program, Health Protection Survey pamphlets, posters and letters of information to clubs and organizations were distributed throughout the county. Channels of communication also were developed through churches, civic clubs, industry, schools and other agencies.

As stated previously, all tests and examinations were conducted at the Jefferson County Health Offices in Hillsboro. Stations were set up for each of the tests to be given, and they were manned by either professional or trained volunteer workers, depending upon the nature of the tests. The last station was manned by a public health nurse who collected the examination forms and checked to assure that all personal and medical history information was obtained from the people who had had the screening examinations. In addition to operating five days a week, the clinic was open one evening a week for more than two months and then three evenings a week the last two months of the four-months' period to provide an opportunity for employed people to take advantage of the free tests and examinations.

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* Determined by the Copper Sulfate specific gravity method.

Trial operation of the clinic revealed that it took approximately 40 minutes for an individual to be processed through the various stations. By careful spacing of the people as they began their visits to the stations, it was anticipated that an average of 65 people a day could be screened. Except for the final two weeks of the operation of the clinic, this schedule was easily maintained. During the fourth month it became increasingly difficult for the appointment secretaries to fill their allotted appointment times, and it was decided to discontinue the operation of the clinic after four months. During this period 4,904 people were screened for the 12 medical conditions and had dental examinations.

If a person were suspected of having any of the conditions for which he was screened, he was sent a letter informing him of "the possibility of a physical condition about which you should have medical advice." The survey personnel did not inform the person of the results of any of the tests, since this was left to the person's own personal physician. Rather, the person was urged to visit his doctor as soon as possible. The survey sent to the physician, who had been designated by the person screened, a copy of the self-recorded personal medical history form and two copies of the results of all tests and examinations done at the survey clinic. One copy was to be retained by the physician for his own records. The other copy was to be returned to the survey after the physician had examined the person for confirmation of the suspected findings. A third copy of this form was retained by the survey as a Health Department record.

If a person were not suspected of having any of the conditions for which he was screened, he was sent a letter so stating. In this letter, however, the person was reminded that the survey tests did not constitute a complete medical examination, and he, too, was advised to visit his own doctor for such an examination. His doctor, too, was sent a copy of his personal medical history form and the results of all tests done at the clinic.

The same procedure was followed in the dental examination records. These were sent to the family dentist.

The Survey Sample

As stated previously, it was the intention to screen as many as possible of the residents of Jefferson County, who were over 39 years of age. According to the 1950 census,[1] there were 13,497 residents in the county 40 years of age or over. Making allowances for population increase and for the fact that residents 39 years of age were accepted into the study, it was roughly estimated that there were in the county at the time of the survey approximately 15,000 people who were eligible for examinations. Of these, 4,904 were screened, of which 288 were not included in the present analysis because of non-eligibility. These 288 people included student volunteers, people under the age of 39 years who came in for the free tests and were not denied the opportunity, and visitors from outside Jefferson County who visited the clinic in operation. In general, then, the present report is concerned with 4,616 residents of Jefferson County, who were 39 years of age or over. Because all records were not available at the time the analysis was undertaken, and because of different subgroupings of screenees, different parts of the report are concerned with groups of different sizes. These are explained appropriately in the text of the report.

From information obtained from the people who were screened, the only bases for comparing the survey sample with the general county population were age and sex. An analysis according to race was not considered important since only 0.6 per cent of the residents of the county are non-white according to the 1950 census. Although it is true that percentagewise, the proportion of non-whites in the survey sample was almost twice that in the county population (1.04 per cent), there were only 34 such people, hardly enough to justify an age-sex breakdown by race. Table 1 shows the numerical and percentage comparison between the survey sample and the 1950 census according to age and sex for the 1,734 screenees who, it is known, followed up with their personal physicians. It is assumed that the other 1,323 patients were not different in these respects.

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[1] Census of the Population: 1950. Volume II, Characteristics of the Population, Part 25, Missouri (United States Government Printing Office, Washington, 1952).

As may be observed in table 1, the survey sample differs significantly from the general population of the county in that the survey included a larger proportion of females and a correspondingly smaller proportion of males. Further, although the proportion of males and females in the sample between the ages of 50 and 69 are much the same as for the county population, the significantly larger proportion of females in the sample occurs in the 40 to 49 year age group, and it is in the over 70 age group in which the much smaller proportion of females occurs in the sample.

TABLE 1

NUMERICAL AND PERCENTAGE COMPARISON OF THE SURVEY SAMPLE AND THE 1950 CENSUS ACCORDING TO AGE AND SEX

	1950 Population						*Survey Sample*					
	Total		*Male*		*Female*		*Total*		*Male*		*Female*	
	NO.	PER CENT	NO.	PER CENT	NO.	PER CENT	NO.	PER CENT	NO.	PER CENT	NO.	PER CENT
All ages	13,497	100.0	6,978	51.7	6,519	48.3	3,118	100.0	1,268	40.7	1,850	59.3
40-49	4,715	34.9	2,453	35.2	2,262	34.7	1,313	42.1	500	39.4	813	43.9
50-59	3,848	28.5	1,998	28.6	1,850	28.4	919	29.5	397	31.3	522	28.2
60-69	2,773	20.6	1,411	20.2	1,362	20.9	598	19.2	237	18.7	361	19.5
70 over	2,161	16.0	1,116	16.0	1,045	16.0	284	9.1	134	10.6	150	8.1
Unknown							4	.1			4	.2

The fact that the older age group were not represented in the sample in proportion to their numbers in the population may well be explained in that it is in this age group in which a greater number of infirm people would be expected to be. It is known, for example, that a small percentage of the nursing home residents of the county were brought in for the examinations. So, also, it is safe to assume, the number of aged people who are confined to their homes probably was not well represented. The fact that the survey sample included a larger proportion of females might indicate a greater interest on the part of adult women in the maintenance of good health. On the other hand, and probably what is more pertinent, it may be that the methods of publicizing the Health Protection Survey appealed more successfully to women than to men. Undoubtedly, both factors were involved. It must be recognized, however, that, despite labor strikes in existence in the county during the period of the survey, males normally work during the day and, for the most part, would only be able to come to the clinic during the evening. While it is true that the survey clinic operated for one, then three evenings a week, it must be conceded that working men might well be somewhat disinclined to spend an evening to come in for the examination, especially if they felt they were not in need of medical treatment at the time.

It was not possible to compare the survey sample with the 1950 census on the basis of the nature of employment since the census figures include all employed persons over the age of 14 years, and to compare a sample of people 39 years of age and over with the total employed county population over the age of 14 years would not be a fair comparison. Nevertheless, the people in the survey sample were classified by sex according to the major occupation groupings as used by the Bureau of the Census,[1] and this information is shown in table 2.

Because of the nature of many of the responses given by persons in the survey sample to the item "employment" on the form which they were to fill out, many of the decisions as to how to classify a person were made rather arbitrarily, and some of the figures in table 2 might be questioned. For example, if a person reported that he was a "glass worker" or a "shoe worker," he was classified as "operative" on the assumption that he probably operated some kind of machine in his work. Whether such arbitrary classification is justifiable or not certainly is open to question, and it may be that many of the people who were classified in this category more properly should have been classified as laborers. This seems especially probable since there were only 38 men classified as laborers, and this in-

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[1] Op. cit., p. 211.

TABLE 2

MAJOR OCCUPATIONAL GROUPINGS OF THE HEALTH PROTECTION SURVEY SAMPLE ACCORDING TO SEX

Major Occupation Group	*Male*		*Female*		*Total*	
	NO.	PER CENT	NO.	PER CENT	NO.	PER CENT
Total	1,325	100.0	1,961	100.0	3,286	100.1
Professional, technical and kindred workers	89	6.7	87	4.4	176	5.4
Farmers and Farm Managers	151	11.4	5	.3	156	4.7
Managers, officials, and props., exc. farm	110	8.3	28	1.4	138	4.2
Clerical and kindred workers	47	3.5	88	4.5	135	4.1
Sales workers	38	2.9	23	1.2	61	1.9
Craftsman, foreman, and kindred workers	251	18.9	8	.4	259	7.9
Operatives and kindred workers	307	23.2	54	2.8	361	11.0
Service workers, including private household	55	4.2	89	4.5	144	4.4
Laborer, including farm and mine	38	2.9	2	.1	40	1.2
Retired	154	11.6	20	1.0	174	5.3
Housewives	—	—	1,531	78.1	1,531	46.6
Not reported or not classifiable	85	6.4	26	1.3	111	3.4

cluded farm and mine laborers. The fact that almost 80 per cent of the women listed "housewife" as their occupation probably should not be surprising for the age group under study, i.e., 39 years of age and over. With no basis for comparison, of course, it is impossible to say whether any of the groups were over or under represented as compared to the county population; it can be said, however, with the possible exception of laborers, that each of the groups was well represented in the survey sample, and that the publicity efforts seemed to reach all occupational levels.

Results of the Study

Screenees Having Suspected and Confirmed Conditions.—Table 3 shows the number and percentage breakdown of screenees having suspected and confirmed conditions.

Actually, the 1,323 screenees for whom confirmation of suspected conditions was not known amounted to 43 per cent of the 3,057 people with suspected conditions. Certainly, if confirmation had been determined for the total group with suspected conditions, the percentage of screenees with one and more than one confirmed conditions would have been much higher.

Conditions Suspected, Confirmed and Previously Treated.—Of the 4,616 people screened, there were 1,559, or 34 per cent who were not suspected of having any of the conditions for which they were screened. If the 401 whose suspected conditions were refuted by their personal physicians on follow-up examinations were added to this, it would mean that at least 1,960, or 42 per cent, of the total group of screenees did not have any of the conditions. Actually, this figure, undoubtedly is low since there would have been many refutations among the 1,323 people who were suspected of having one or more of the conditions but for whom it is not known if they visited their physicians for follow-up examinations.

Table 4 is concerned with the 3,057 screenees with suspected conditions. It is unfortunate that in many instances the personal physicians did not report back to the survey personnel concerning confirmation or previous treatment. This ran as high as 60 per cent or more for confirmation (combined blood and urine tests for diabetes, glaucoma, syphilis, and brucellosis); and although for the fact of previous treatment was

TABLE 3

NUMBER AND PERCENTAGE BREAKDOWN OF SCREENEES HAVING SUSPECTED AND CONFIRMED CONDITIONS

	Number	*Per Cent*
Total Group Screened	4,616	100
No Suspected Conditions	1,559	34
With Suspected Conditions	3,057	66
Suspected but Unconfirmed Conditions	401	9
Confirmation Not Known	1,323	28
With Confirmed Conditions	1,333	29
One Confirmed Condition Only	754	16
More Than One Confirmed Condition	579	13

determined for all of the confirmed cases of syphilis, previous treatment was not known for 63 per cent of the confirmed cases of hearing loss. Despite this, however, some of the results shown in table 4 are both interesting and important.

Because of the high number of cases for whom confirmation and previous treatment was not known, the results in table 4 are more informative in terms of their negative aspects. For the same reason, of course, all figures must be thought of as minimum estimates. Thus, for hypertension, for instance, it is known that 37 of the 263 confirmed cases had not been under previous treatment; or to put it differently, the survey brought to light at least 37 "new" or previously untreated cases of hypertension. Similarly, 12 of the 22 known cases of glaucoma had not been previously treated. So, also, 44 previously untreated cases of cardiovascular disease were discovered, two of the 14 confirmed cases of syphilis had not been under previous treatment, and 16 of the 52 confirmed cases of diabetes had not been under previous treatment. In short, of the 2,223 confirmed conditions, there were, at least 468, or 20 per cent, which can be considered as "new" or previously unknown in the sense that they had not been previously treated. Assuming that the same proportion would hold for those conditions which were not reported back as to previous treatment as for those which were reported back, it may be speculated that probably 38 per cent, or 845 of the 2,223 confirmed conditions had not previously been under treatment.

TABLE 4

MEDICAL CONDITIONS SUSPECTED, CONFIRMED AND PREVIOUSLY TREATED FOR 3,057 SCREENEES WITH SUSPECTED CONDITIONS

Conditions	SUSPECTED	*Confirmed* YES	NO	DO NOT KNOW	*Previous Treatment* YES	NO	DO NOT KNOW
Overweight	891	448	3	440	160	113	175
Hypertension	603	263	37	303	158	37	68
Visual Acuity	1,351	571	42	738	192	99	280
Glaucoma	310	22	60	228	4	12	6
Hearing Loss	402	153	15	234	24	33	96
Chest X-ray—Heart	178	75	8	95	41	12	22
Chest X-ray—Lungs	90	36	4	50	21	4	11
Chest X-ray—Heart and Lungs	12	6	2	4	5	—	1
Chest X-ray—Other	41	22	1	18	15	2	5
Chest X-ray—Total	321	139	15	167	82	18	39
Cardiovascular Disease	723	268	86	369	163	44	61
Syphilis	51	14	5	32	12	2	—
Anemia	989	263	256	470	78	89	96
Brucellosis	20	1	6	13	—	1	—
Diabetes—Blood Test	93	15	28	50	8	3	4
Diabetes—Urine Test	67	9	19	39	4	4	1
Diabetes—Blood and Urine Test	84	28	6	50	18	9	1
Diabetes—Total	244	52	53	139	30	16	6
Nephritis	112	29	26	57	17	4	8
Total	6,017	2,223	604	3,191	920	468	835

In summary, there were 6,017 conditions suspected among the 4,616 people in the total group for an average of 1.3 conditions per person. Of the 6,017 conditions, 2,223, or 37 per cent, were confirmed on follow-up examination by the personal physicians. Six hundred and four, 10 per cent, were not confirmed, and confirmation was not reported for 3,191, or 53 per cent, of the total number of suspected conditions. Of the 2,223 confirmed conditions, 920, or 41 per cent, were reported to have been previously treated. Four hundred and sixty-eight were reported not to have been previously treated, and whether or not they had been previously treated was not reported for 835, or 38 per cent, of the confirmed conditions.

Such total figures and percentages, of course, do not differentiate between those conditions which, medically, might be considered more serious than others. Even within a given disease category, such as cardiovascular disease, the condition may be a serious thing for one person and a relatively minor one for another. Even so, it can be said that the survey disclosed many cases of previously untreated conditions which, certainly, should be under medical care. And, since the number of cases in which previous treatment was not reported was almost twice as large as the number of cases which had not been under previous treatment, it might well be suspected that the "true" number of previously unknown conditions was considerably higher than shown in table 4.

TABLE 5

PERCENTAGE OF MALES AND FEMALES IN VARIOUS AGE RANGES HAVING CONFIRMED CONDITIONS

	Male					*Female*					
	39-49	50-59	60-69	70-OVER	TOTAL	39-49	50-59	60-69	70-OVER	TOTAL	*Grand Total*
Overweight	6.3	6.0	8.0	8.3	6.7	13.5	20.9	23.5	26.7	18.3	13.6
Hypertension	1.3	3.8	8.9	21.1	5.4	2.1	8.6	19.9	37.3	9.8	8.0
Visual Acuity	7.7	14.9	28.7	45.1	17.4	11.1	17.6	21.1	46.7	17.4	17.4
Glaucoma	.4	.8	.8	.8	.6	.2	.6	1.9	1.3	.7	.7
Hearing	2.2	6.8	11.8	34.6	8.5	.1	1.1	4.7	10.7	2.0	4.7
Chest X-ray	.9	3.0	6.8	14.3	3.9	.8	3.6	8.3	20.7	4.4	4.2
Cardiovascular	2.0	6.3	14.8	31.6	8.5	3.4	6.3	14.4	26.0	7.9	8.2
Anemia	2.9	5.5	5.5	8.3	4.7	.1	.2	.3	.7	.2	.4
Syphilis	.2	.5	.4	4.5	.8	10.7	9.4	8.3	15.3	10.2	8.0
Brucellosis	.2	—	—	—	.1	—	—	—	—	—	.03
Diabetes	.4	1.8	1.3	6.0	1.5	.9	1.9	2.8	2.7	1.6	1.6
Nephritis	—	1.3	1.7	3.0	1.0	.2	.4	2.5	2.0	.8	.9

Confirmed Conditions by Age and Sex.—Table 5 shows the percentage of males and females in the various age ranges having confirmed conditions.

As might have been expected, the prevalence rate tends to increase with increased age for most conditions. This is particularly true for hypertension, visual acuity, hearing loss, heart and lung conditions detected by chest x-ray and cardiovascular disease. It is true, also, but to a lesser degree, for each of the other conditions, i.e., overweight, glaucoma (especially among females), syphilis, anemia, diabetes and nephritis. There was but one confirmed case of brucellosis.

The differences in the incidence of the various conditions between the sexes also are apparent upon inspection of table 5. For overweight, it was almost three times as high for the females as for the males. Any explanation for this sex difference in the incidence of overweight is difficult to conceive, especially since it is usually thought that women tend to concern themselves with their weight problems more than men do, and attempt to do something about them. On the other hand, it may be that, since women usually are more concerned about their weight than men, more overweight women came in for the tests and examinations than overweight men in the hope that they might get some help with their weight problems.

Explanations for the fact that the incidence for hypertension and anemia was almost twice as high for the females as for the males are even more elusive. Certainly, any effort to relate these conditions to overweight must depend upon much more conclusive evidence than is available from this study. It is important to note, however, that the incidence for hypertension goes up dramatically with increased age. For the males this increase is from 1.3 per cent for those in the 39 to 49 year age group to 21.1 per cent for those in the over 70 age group; for the females the increase is from 2.1 per cent to 37.3 per cent for the same age groups.

The fact that the prevalence rate for hearing loss was over four times higher for men than for women probably can be explained by the fact that many of the confirmed cases of hearing loss were reported by the personal physicians as being "occupational deafness," which, normally, one would expect to occur more frequently with men than with women. The only other condition which occurred more frequently with men than with women was syphilis.

Prevalence rates based on national estimates[1] for ten conditions frequently screened for in multiphasic screening programs are compared with the rates found in the Jefferson County study in table 6.

TABLE 6

PERCENTAGE COMPARISON OF HEALTH PROTECTION SURVEY SAMPLE WITH NATIONAL ESTIMATES OF APPARENTLY WELL PEOPLE OVER AGE OF 15 YEARS

	National Estimates	*Survey Sample*
Overweight	20.0	13.6
Hypertension	3.8	8.0
Visual Acuity	26.6	17.4
Glaucoma	2.0	.7
Hearing	25.0	4.7
Tuberculosis	1.8	1.3[a]
Cardiovascular Disease	3.9	8.2
Syphilis	4.8	.4
Anemia	7.5	8.0
Diabetes	2.2	1.6

a. Based on lung abnormalities detected in chest x-ray.

Only for hypertension and cardiovascular disease are the rates significantly higher for the study sample than for the national estimates, and this, probably, is what one would expect since the present study is based on an older age group than the national estimates. Conditions for which the national estimates were significantly higher were overweight, visual acuity, glaucoma, hearing loss and syphilis. It is not proposed, of course, that the survey sample is representative of any larger population group; and the observed differences in table 6 undoubtedly are the result of many variables in addition to the obvious one of age, and not the least of which is the notable fact that, in the present study, the people came in for the tests and examinations voluntarily. Nevertheless, it is important to note that for most conditions the survey sample had a much lower incidence than for the national estimates.

Confirmed Conditions by Marital Status.—There were so few people in the present study who were single, divorced or separated that it was not feasible to treat these categories as individual groups. Rather, they were combined with those who were widowed to form a group defined as those who were "not married," i.e., not living with a spouse. The males and females in this group were compared to the married males and females according to the nature of the confirmed conditions. No significant differences were found, and it is assumed that for the group under study the various confirmed conditions were not related to marital status. This is particularly interesting since, as will be shown later, those of both sexes who were married reported many more symptoms than those who were not married.

Confirmed Conditions by Occupational Groups.—Table 7 shows the percentage of people in each of the major occupational groups who had the various confirmed conditions. Table 7 also shows the average number of confirmed conditions per person for each of the occupational groups.

Inspection of table 7 reveals that the highest average number of conditions per person is in the retired group, which is what might have been expected since most of the older people were in this group. Evidently, what brought the average up for the retired group is the relatively high incidence of hypertension, poor visual acuity, hearing loss, heart and lung conditions detected by chest x-ray and cardiovascular disease. Among the people who, at least from the standpoint of age, were employable, those who indicated they were laborers had the highest average. Their main difficulties were hypertension, poor visual acuity, hearing loss, cardiovascular disease and anemia. It is interesting to note that housewives and service workers were about the same, with .78 and .70 conditions per person respectively. The housewives were high in overweight, hypertension, poor visual acuity and anemia. The service workers were high in overweight and poor visual acuity. At least in terms of the conditions for which the people were screened, it would appear that the professional and sales groups were the healthiest, with .36 and .33 conditions per person, respectively. The farmers, who frequently are thought to be one of the healthier occupational groups, probably would have had a much lower per person rate had it not been for the relatively large number of cases of poor visual acuity and

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[1] Chapman, A. L., M.D., "*The Concept of Multiphasic Screening.*" Public Health Reports, 64; 42:1131, October 21, 1949.

TABLE 7

PERCENTAGE OF 3,286 SCREENEES IN EACH OCCUPATIONAL GROUP HAVING VARIOUS CONFIRMED CONDITIONS

	Prof.	*Farm*	*Mgr.*	*Clerical*	*Sales*	*Craftsmen*	*Operators*	*Service*	*Laborers*	*Retired*	*Housewives*	*Don't Know*
Overweight	10.2	5.1	6.5	7.4	6.6	6.9	6.4	16.7	7.5	8.6	19.9	9.9
Hypertension	4.0	2.6	2.2	2.2	4.9	4.2	3.3	5.6	10.8	17.8	10.9	9.0
Visual Acuity	9.1	19.9	11.6	10.4	4.9	12.4	10.0	27.1	40.0	43.7	17.8	16.0
Glaucoma	—	.6	1.4	.7	—	.8	—	1.4	—	1.1	.7	1.8
Hearing	2.3	11.5	5.8	1.5	—	5.0	5.0	2.8	12.5	24.7	2.3	2.7
Chest X-ray	.6	3.2	1.4	2.2	1.6	2.7	2.8	2.1	—	14.4	4.8	3.6
Cardiovascular	3.4	9.6	3.6	5.9	6.6	7.3	4.2	4.2	12.5	24.7	8.7	7.2
Syphilis	—	—	—	—	—	.4	.8	.7	—	3.4	.2	—
Anemia	6.3	7.1	9.4	8.1	4.9	4.6	4.4	6.9	10.0	8.6	9.9	4.5
Brucellosis	—	—	—	—	—	—	.3	—	—	—	—	—
Diabetes	—	—	.7	—	3.3	—	1.7	2.1	2.5	4.6	2.0	.9
Nephritis	.6	1.3	.7	—	—	.8	.6	.7	2.5	2.3	1.0	—
Mean	.36	.61	.43	.41	.33	.45	.40	.70	.98	1.54	.78	.56

hearing loss. It is also important to note that the managerial and clerical groups had the lowest rates for hypertension, and that the professional group had the lowest rate for cardiovascular disease.

Confirmed Conditions and Recency of Last Medical Examination.—On the Personal Medical History form which the people were requested to fill in and bring with them to the clinic when they came for the examinations, one item was concerned with the length of time since they had last been examined by a doctor. Table 8 shows how those with confirmed conditions compared to those with no confirmed conditions as to recency of their last medical examination.

The observed differences in table 8 are statistically significant ($p = < .01$), and it would appear that for those who did not have any of the conditions for which the survey screened, as a group, it had been a considerably longer time since they had last had a medical examination. Actually, of those with confirmed conditions, 52 per cent had been examined by a physician within a year previous to the clinic tests, whereas of those with none of the conditions, only 42 per cent had been so examined. Although this probably is what would have been expected, since ill people are more apt to visit a doctor than well people, this fact, in itself, introduces a caution in interpreting table 8. The pertinent item on the Personal Medical History form did not specify the reason the person was last examined, what kind of examination it was, or what kind of doctor did the examination. Thus, the people may well have interpreted the item differently, i.e., many of the people with confirmed conditions may have thought in terms of an examination for a specific condition, whereas many of those with none of the conditions may have been more inclined to think in terms of a general medical examination. However this may be, almost half of all people who were screened, 46 per cent, reported they had been seen by a doctor for some kind of ex-

TABLE 8

LENGTH OF TIME REPORTED BY SCREENEES SINCE THEY WERE LAST EXAMINED BY THEIR PHYSICIANS

	With Confirmed Conditions		*With No Confirmed Conditions*		*Total*	
	NUMBER	PER CENT	NUMBER	PER CENT	NUMBER	PER CENT
Total	1,333	100.0	1,953	99.9	3,286	100.0
Less than one year	694	52.0	825	42.2	1,519	46.2
One to five years	373	28.0	706	36.1	1,079	32.8
Over five years	133	10.0	277	14.2	410	12.8
Not reported	133	10.0	145	7.4	278	8.5

amination within the year prior to their visit to the survey clinic. Not shown in table 8 is the interesting fact that 2 per cent of each group reported that they had never been examined by a doctor, and, for the most part, these people were in the older age groups.

Medical History Information by Age and Sex. —The information gained on the Personal Medical History form was divided into three general categories: (1) reported symptoms, (2) reported diagnostic conditions for which the person had received prior treatment and (3) the length of time since the person had last been examined by a doctor. Table 9 shows the number of reported symptoms according to age and sex, and the observed differences are statistically significant (p = <.01). Only for those people from 60 to 69 years of age was the average number of reported symptoms higher for males than for females, 4.3 and 4.2, respectively; and this particular difference was not statistically significant. As might have been expected, the average number of reported symptoms tended to increase with increased age. The females reported a significantly higher number of instances of the following symptoms: weight gain in the past year, fainting and dizzy spells, severe headaches, tired or draggy feeling, and swollen ankles. The males, on the other hand, reported a higher number of instances of unusual thirst and drinking lots of liquids, and persistent cough. It is to be noted that, for the most part, the symptoms most frequently reported by the women could be related to menstruation or the menopause.

TABLE 9

REPORTED SYMPTOMS BY AGE AND SEX

	Male			*Female*			*Total*		
	SYMPTOMS REPORTED	NO. OF PEOPLE	AVERAGE PER PERS.	SYMPTOMS REPORTED	NO. OF PEOPLE	AVERAGE PER PERS.	SYMPTOMS REPORTED	NO. OF PEOPLE	AVERAGE PER PERS.
Total	4,338	1,224	3.5	7,234	1,801	4.0	11,572	3,025	3.8
39-49	1,611	523	3.1	3,204	850	3.8	4,815	1,373	3.5
50-59	1,272	362	3.5	1,992	487	4.1	3,264	849	3.8
60-69	956	222	4.3	1,360	332	4.1	2,316	554	4.2
70-over	499	117	4.3	678	132	5.1	1,177	228	5.2

Table 10 shows the number of reported conditions for which the people reported they had been under the care of a doctor as well as the average number of conditions per person of each sex in each of the age ranges.

As with the symptoms, so also did the reported conditions tend to increase with increased age. Again, the females reported a higher number of conditions than the males (p = <.01). In fact, for none of the conditions did the males report a significantly higher number. Thus, it has been shown that reported symptoms, reported conditions, as well as conditions confirmed by examinations, were higher for the upper age ranges and for females.

Table 11 shows the period of time since the people in the study group reportedly had last

TABLE 10

REPORTED CONDITIONS BY AGE AND SEX

	Male			*Female*			*Total*		
	CONDITIONS REPORTED	NO. OF PEOPLE	AVERAGE PER PERS.	CONDITIONS REPORTED	NO. OF PEOPLE	AVERAGE PER PERS.	CONDITIONS REPORTED	NO. OF PEOPLE	AVERAGE PER PERS.
Total	1,027	1,224	.8	2,338	1,801	1.3	3,365	3,025	1.1
39-49	311	523	.6	877	850	1.0	1,188	1,373	.9
50-59	298	362	.8	667	487	1.4	965	849	1.1
60-69	261	222	1.2	516	332	1.6	777	554	1.4
70-over	157	117	1.3	278	132	2.1	435	228	1.9

TABLE 11

PERIOD OF TIME SINCE LAST EXAMINED BY A DOCTOR BY AGE

	39-49		*50-59*		*60-69*		*70-over*		*Total*	
	NO.	PER CENT	NO.	PER CENT	NO.	PER CENT	NO.	PER CENT	NO.	PER CENT
Total	1,481	100	919	100	598	100	288	100	3,286	100
Less than 1 year	593	40	403	44	320	54	170	59	1,486	46
1 to 5 years	561	38	326	35	166	28	57	20	1,110	33
Over 5 years	212	14	117	13	63	10	22	8	414	13
Not Reported	115	8	73	8	49	8	39	13	276	8

been examined by a doctor according to age; and, again, the observed differences are significant (p = <.01).

Inspection of table 11 reveals that as age increased, the people tended to have seen their doctors for examinations more recently. Since it has already been shown that the older people had a greater proportion of confirmed conditions, one suspects the recency with which they were examined is related to the fact that they were ill as much as, if not more, than to the idea of periodic medical check-ups for the maintenance of good health.

Table 12 shows the period of time since the study group reportedly had last been examined by a doctor according to sex. The observed differences are significant (p = <.01).

A glance at table 12 indicates that the females tended to have been examined by their doctors more recently than the males; and, again, it should be pointed out that this probably is related to the fact that the women had more of the confirmed conditions than men. Just as it has been shown, then, that the females and the people in the older age groups reported the most symptoms and conditions, and had the most confirmed conditions, so, also, were these the ones who reported more recent medical examinations.

Medical History by Marital Status.—Table 13 shows the relationship of marital status to the reported symptoms.

In table 13, the greater number of reported symptoms for women again is apparent. Of greater importance, however, is the fact that for both sexes, those who were married reported a significantly larger number of symptoms than those who were not married. Those symptoms

TABLE 12

PERIOD OF TIME SINCE LAST EXAMINED BY DOCTOR BY SEX

	Male		*Female*		*Total*	
	NUMBER	PER CENT	NUMBER	PER CENT	NUMBER	PER CENT
Total	1,325	100	1,961	101	3,286	101
Less than 1 year	503	38	983	51	1,486	46
One to 5 years	511	39	599	31	1,110	34
Over 5 years	203	15	211	11	414	13
Not Reported	108	8	168	8	276	8

TABLE 13

REPORTED SYMPTOMS BY MARITAL STATUS

	Male			*Female*		
	SYMPTOMS REPORTED	NO. OF PEOPLE	PER PERS.	SYMPTOMS REPORTED	NO. OF PEOPLE	AVERAGE PER PERS.
Total	4,338	1,224	3.5	7,231	1,801	4.0
Married	3,941	1,051	3.7	5,670	1,268	4.5
Not Married	397	173	2.3	1,561	533	2.9

which married people of both sexes reported more frequently were fainting and dizzy spells, severe headaches, tired or draggy feeling, dental trouble, shortness of breath and frequent indigestion or stomach-ache. The one symptom which was reported more frequently by married men was unusual thirst and drinking lots of liquids; the one symptom reported more frequently by the married women was considerable weight gain during the previous year.

TABLE 14

REPORTED CONDITIONS BY MARITAL STATUS

	Male			*Female*		
	CONDITIONS REPORTED	NO. OF PEOPLE	AVERAGE PER PERS.	CONDITIONS REPORTED	NO. OF PEOPLE	AVERAGE PER PERS.
Total	1,027	1,224	.8	2,338	1,801	1.3
Married	909	1,051	.9	1,762	1,268	1.4
Not Married	118	173	.7	576	533	1.1

Table 14 shows the number of reported conditions for which the people reportedly had received treatment according to marital status.

The fact that the married people reported more symptoms than those who were not married is particularly interesting since, as shown in table 14, they did not report a significantly larger number of conditions for which they had been treated. The only condition which was reported more frequently by the married people was eye trouble, and this held true for the men only.

TABLE 15

PERIOD OF TIME SINCE LAST EXAMINED BY A DOCTOR BY MARITAL STATUS

	Male				*Female*					
	Married		*Not Married*		*Married*		*Not Married*		*Total*	
	NO.	PER CENT	NO.	PER CENT	NO.	PER CENT	NO.	PER CENT	NO.	PER CENT
Total	1,219	100	106	100	1,555	100	406	100	3,286	100
Less than 1 year	454	37	49	46	769	49	214	53	1,486	46
1 to 5 years	480	39	31	29	482	31	117	29	1,110	33
Over 5 years	184	15	19	18	167	11	44	11	414	13
Not Reported	101	9	7	7	137	9	31	7	276	8

Table 15 shows the period of time since the people in the study group had last been examined by a doctor according to marital status.

Again, the fact that the females tended to have been examined by a doctor more recently than the males is apparent from the figures in table 15. It is to be noted, however, that those people of both sexes who were not married tended to have been examined by a doctor more recently than those who were married. Thus, with the group under study, the married people reported more symptoms but did not report a greater number of actual conditions for which they had received treatment; however, more of them had been examined by a doctor within the year prior to the time of the survey.

Follow-Up and Non-Follow-Up Cases.—There were 129 people who came in for the tests and examinations who were suspected of having one or more of the various conditions but who, it is definitely known, did not follow up with their personal physicians for confirmation of the suspected findings. It was felt that this might have been accounted for if these people had relatively minor conditions of which they were aware, and for which they felt the expense of a medical examination was not justified. This was evidently not the case, however, since there was no significant difference between this group and those who did follow up with their personal physicians in terms of the proportion of any of the suspected conditions. The suspected and confirmed conditions of the people who fol-

TABLE 16

SUSPECTED AND CONFIRMED CONDITIONS OF PERSONS WHO FOLLOWED UP WITH THEIR PHYSICIANS COMPARED TO THE SUSPECTED AND ESTIMATED CONFIRMED CONDITIONS OF THOSE WHO DID NOT

	Followed Up With Physician			*Did Not Follow Up With Physician*	
	SUSPECTED	CONFIRMED		SUSPECTED	ESTIMATED CONFIRMED
		NUMBER	PER CENT		
Overweight	526	448	85.2	33	28
Hypertension	335	263	78.5	24	19
Visual Acuity	776	571	73.6	63	47
Glaucoma	92	22	23.9	8	1
Hearing	209	153	73.2	16	12
Chest X-ray—Heart	103	75	72.8	12	9
Chest X-ray—Lungs	43	36	83.7	6	5
Chest X-ray—Heart and Lungs	9	6	66.7	—	—
Chest X-ray—Other	29	22	75.9	2	1.5
Chest X-ray—Total	184	139	75.5	20	15
Cardiovascular Disease	372	268	72.0	38	27
Syphilis	20	14	70.0	2	1.4
Anemia	618	263	42.6	50	22
Brucellosis	8	1	12.5	3	—
Diabetes—Blood Test	47	15	31.9	5	1.6
Diabetes—Urine Test	29	9	31.0	3	1
Diabetes—Both Tests	35	28	80.0	4	3
Diabetes—Total	111	52	46.8	12	6
Nephritis	68	29	42.6	1	—

lowed up with their personal physicians compared to the suspected and estimated confirmed conditions of those who did not are shown in table 16.

The right hand column of table 16 shows the number of suspected conditions of the group who did not follow up with their doctors which might have been confirmed if they had done so on the basis of the percentage of suspected conditions which were confirmed for the group who did visit their doctors following the clinic tests. Thus, for example, there might have been 19 more cases of hypertension and 27 more cases of cardiovascular disease.

The group of 129 people who had suspected conditions but who did not follow up with their personal physicians for confirmation was compared to the group who did visit their doctors on the basis of sex, age and reported occupation. In none of these areas did the two groups differ significantly. In view of these findings, it was concluded that the reasons the 129 people who were suspected of having one or more of the conditions did not visit their physicians for follow-up examinations were probably personal and circumstantial, and not related to age, sex, occupation or the kind of medical conditions they had.

Additional Conditions Reported by Personal Physicians.—Although the personal physicians were not specifically requested to report back to the survey any new or additional conditions they discovered upon their more complete examinations, in some instances they took it upon themselves to do so. It is unfortunate that this information was not requested, for it was received for only 68 people. The additional conditions voluntarily reported back to the survey by the physicians were: cardiovascular disease, 24; hypertension, 12; neurosis, 7; duodenal ulcer and osteoarthritis, 3 each; cystocele, bronchitis, hernia and rheumatoid arthritis, 2 each; and 28 other conditions for one person each. From the physicians' brief comments, it seemed evident that all of these conditions probably were existent at the time the people were screened at the survey clinic.

Location of Physicians Listed by Screenees.—Table 17 shows the number and per cent of the 4,616 screenees who listed as their personal physicians doctors located in Jefferson and surrounding counties.

As may be observed in table 17, 261, or 74 per cent, of the physicians listed were located in the metropolitan St. Louis area, and yet they were named by only 1,013, or 22 per cent, of the screenees. On the other hand, 3,443 screenees, approximately 75 per cent of the total group, listed Jefferson County doctors, although these represented only 12 per cent of the total number of physicians. The Jefferson County physicians, then, attended an average of 80 screenees, per physician, as compared to approximately four patients per physician for the St. Louis doctors. Actually, of course, this does not present an accurate picture of the physician-patient ratio in Jefferson County for two reasons. In the first place, there undoubtedly are physicians in Jefferson County whose practices are concerned largely with children, and since there were no children in the study, these physicians must have been underrepresented. Then, too, the range of the number of screenees listing each physician was very wide, indeed. There were 10 Jefferson County physicians who were listed by only two patients each. On the other hand, one Jefferson County doctor was claimed to be the personal physician by 736 screenees, or 16 per cent of the total group. In fact, there were seven Jefferson County physicians who were listed by more than 200 screenees each.

Of the 351 physicians, 10 were osteopathic physicians, and they were listed by 412 patients. The six Jefferson County osteopathic physicians were listed by 334 screenees for an average of 57 patients per osteopath as compared to an average of 80 patients per medical doctor.

Summary and Conclusions

During the summer of 1958, the Division of Health of Missouri conducted a multiphasic screening program in connection with the Jefferson County Health Protection Survey in Jefferson County, Missouri. Of an estimated county population 39 years of age or over of 15,000 people, 4,904 were screened for 12 medical conditions. The present report is concerned with 4,616 of these, of which 3,057 had no suspected conditions and 1,559 had suspected conditions. The suspected conditions were confirmed by personal physicians for 1,333 people and not confirmed for 401. Of the 1,333 people with confirmed conditions, 754 had one condition only and 579 had more than one condition.

The survey sample differed significantly from the county population of the same age range as described by the 1950 census in that the study group had a larger proportion of females, especially in the 40 to 49 year age group. Although the study group seemed to have a relatively small number of laborers (although no comparison with census figures was possible), a breakdown of the group according to occupational groups indicated that all levels of employment were represented to a degree sufficient to justify an analysis of the confirmed conditions according to occupational groupings.

There were 468 confirmed conditions discovered which, according to the personal physicians, had not been previously treated. Of these, probably the most important were 37 cases of hypertension, 12 cases of glaucoma, 44 cases of cardiovascular disease, two cases of syphilis, 89 cases of anemia, one case of brucellosis, 16 cases of diabetes, and four cases of nephritis. It is to be emphasized that, because of the large number of instances in which the personal physicians did not report back to the survey, the numbers and percentages reported for confirmation and previous treatment should be accepted as minimum indications.

TABLE 17

NUMBER AND PER CENT OF 4,616 SCREENEES WHO LISTED PHYSICIANS IN JEFFERSON AND SURROUNDING COUNTIES

	Patients		*Physicians*
County	NUMBER	PER CENT	*Number*
Total	4,616	100.00	351
Jefferson	3,443	74.59	43
St. Louis	1,013	21.95	261
Franklin	67	1.45	10
St. Francois	25	.54	9
Ste. Genevieve	12	.25	2
Washington	7	.15	2
Other and Not Known	49	1.07	24

For almost all conditions, the prevalence rates were higher for the older age groups. Overweight, hypertension and anemia were found much more frequently among females than among males. The men, on the other hand, were found to have more cases of hearing loss, and most of the 14 cases of syphilis were found among the men. There was no significant difference in the number of confirmed conditions for married people and those who were not married despite the fact that the married people reported more symptoms on the Personal Medical History form. Among the people of employable age, the highest average number of confirmed conditions was among the laborers, and the lowest average number of confirmed conditions was among the professional and sales groups.

As might have been expected, those people with confirmed conditions tended to have been examined by a physician more recently than those with none of the confirmed conditions, since 52 per cent of the former had been examined by a physician within the year prior to the clinic tests whereas only 42 per cent of the latter had been so examined. Two per cent of the total group reported they had never been examined by a physician. As with the confirmed conditions, so also with the reported symptoms and conditions was there a greater number among the older people and among the females. Further, the older people and the females tended to have been examined more recently by their own physicians. Although married people did not report more conditions for which they had been treated, they did report many more symptoms than those who were not married. The group of 129 people who were suspected of having one or more of the various conditions but who did not visit their personal physicians for follow-up examinations did not differ significantly from those who did follow up with their physicians in terms of age, sex, occupation or the kinds of conditions they had. It was concluded, therefore, that the reasons they did not visit their physicians were not related to these factors, and probably were personal and circumstantial.

Although the personal physicians were not specifically requested to report back additional conditions which they either knew about or which were discovered upon more complete examinations, some of them voluntarily did so. Included were 24 additional cases of cardiovascular disease and 12 additional cases of hypertension.

There were 351 doctors claimed as personal physicians by the people in the study group, of which 10 were osteopathic physicians. Approximately 75 per cent of the study group listed physicians who were county residents, although these county resident physicians accounted for only 12 per cent of all the doctors listed by the screenees. Conversely, 22 per cent of the screenees listed St. Louis physicians, and these accounted for 74 per cent of the total number of doctors. Two per cent of the screenees listed physicians in adjacent counties, and only 1 per cent listed more distant physicians or none at all.

If the relatively high percentage of confirmation of suspected conditions is accepted as a criterion of test validity, it would seem that the tests and examinations used in the screening phase of the Jefferson County Health Protection Survey were adequate for these conditions. Further, if the number of previously untreated conditions which were brought to the attention of both patient and physician is accepted as a measure of worthwhileness of the survey, it must be accepted that a tremendous stride has been made in protecting the health of the adult population of Jefferson County, Missouri. Certainly, the number of people who visited their physicians with previously untreated conditions, in itself, is an indication of the wisdom and need for periodic medical check-ups for early detection, early treatment and the maintenance of good health. Since adequate information was not obtained either from the screenees or their physicians, it can only be speculated that probably there were many patients who at one time were under treatment for a chronic disease, allowed treatment to lapse, and were reinstated in treatment as a result of the survey.

There are, of course, some important questions still left unanswered. Although it is true that, had the personal physicians been asked to report back to the survey, the number of confirmed and previously untreated cases would have been somewhat higher, it is also true that a more accurate picture of the number of unconfirmed cases would have been obtained. The importance of this, of course, is in terms of the financial and emotional cost to a person who was informed that the screening tests indicated good reason for him to see his physician as soon as possible only to discover that the suspected findings did not, in fact, exist. Further, did the fact that thousands of people in a relatively sparsely populated county were, within the period of a few months, urged to see their physicians as soon as possible create a problem for the doctors, many of whom probably were already overworked in their treatment of ill people? Still further, the larger question of health education still must be answered. Does such a survey as the one conducted in Jefferson County really encourage seemingly well people to visit their physicians periodically for health check-ups? These and similar questions can only be answered by a follow-up study utilizing the interview technic with the county physicians and residents to learn of their attitudes and feeling toward the program.

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R. O. Muether, M.D.

President's Message

It is sincerely hoped that all members took advantage of their privilege and duty and cast ballots on November 8—thus taking their parts as public-minded citizens.

The elections are over but the "physician as a citizen" cannot relax. Beginning soon after the first of the year both Congress and the state legislature will go into session. There is carry-over legislation in the Congress which needs attention by physicians, such as perhaps, promoting the Kerr-Mills bill, and there is little doubt but that legislation which will need opposition will be introduced.

In the state legislature several bills are already in the making for introduction in the next session, among them a doctor's lien law and a law relating to physical therapy licensing and regulation. These and many others will require the attention of practicing physicians—and members of the Association. Let us retain our interest as citizens as well as physicians.

R. O. Muether M.D.

EDITORIAL

INFLUENZA IMMUNIZATION

Influenza, particularly of the A_2 type, has been responsible for three epidemics, 1957, 1958 and 1960. These epidemics have resulted in an increased mortality of 60,000 to 70,000 persons, chiefly among chronically ill and the aged. Much of this could be prevented if physicians emphasized the necessity of yearly vaccination with the polyvalent influenza vaccine.

The cause of the increased mortality is primarily influenza with pneumonia and influenza complicating cardiovascular disease. This suggests at once the necessity for giving special attention to the aged who suffer from degenerative and debilitating diseases and who fall easy prey to the influenza virus.

This group, however, is not the only group which must be encouraged and persuaded to have themselves immunized against influenza. The cardiac patient, whether his difficulty arises from rheumatic fever, arteriosclerosis, myocardial insufficiency or congenital disease, should be immunized.

The patients with asthma, bronchitis, emphysema, tuberculosis and pulmonary fibrosis represent another group of high susceptibility as do the diabetic and the malnourished patient, and those with kidney disease.

It would seem that these groups are so large and important that every physician must make an effort to immunize these patients when they are under his care. It is not enough to be willing to give the injections on demand, we, as physicians, must go further than this and actively urge these people to protect themselves by immunization each year.

Every physician's office should be a center of preventive medicine and the influenza immunization should be a part of the program. Every one should be urged to participate but the extra special effort should be devoted to the aged and the chronically ill.

It is important that these groups be immunized annually regardless of the predicted incidence of influenza in any one year.

THE CHANGING PERSPECTIVE IN MEDICAL PRACTICE

Not many years ago the greatest concern in the practice of medicine probably was the infant mortality rate and the maternal mortality rate. Through the years, and especially in recent years infant mortality has been lowered so that it has to some extent become the practice of preventive medicine. It has come a long way from the medieval years when a family counted their children only after they had passed infancy.

Now, the increased knowledge and facilities available to medicine, and again the practice of preventive medicine, has brought an almost new facet to medical practice. This new facet is not limited to the medical field but to all sections of life today. This facet is the elder citizen.

An insight into the trend of mortality and longevity in later life is presented in a recent *Statistical Bulletin* of the Metropolitan Life Insurance Company.

Data is given separately for white males and white females at every fifth age from 60 to 80 years, beginning with the period 1929-1931, the earliest for which nationwide figures are available.

The mortality rate was appreciably lower in 1958 than in 1929-1931 among older persons of each sex. Among white males, a reduction was recorded at each age from 60 to 80 years, the decrease averaging about 13 per cent. The largest relative decline in mortality among males occurred during the decade of the 1940's, but substantial progress was also made both during the 1930's and in the early 1950's. More recently there have been small increases in mortality among white males, associated, in part at least, with the unusually high prevalence of respiratory diseases.

Particularly noteworthy are the absolute reductions in mortality during the period under review. For example, among white males at age 60 the death rate fell from 26.4 per 1,000 in 1929-1931 to 22.6 in 1958, a decrease of 3.8 per 1,000. Similarly, at age 75 the rate dropped from 85.3 to 73.3, or by 12.0 per 1,000. These reductions at ages 60 and 75 take on added significance when it is observed that they are equal to the total mortality currently experienced by white males at ages 41 and 52, respectively.

Women have made considerably greater gains than men, on both an absolute and a relative basis. Since 1929-1931, the relative reductions in the death rate for white women have amounted to as much as 47 per cent at age 60, to about 40 per cent at age 65, and to more than 30 per cent up through age 80. Moreover, at most of the older ages the mortality rates for women reached their lowest levels in 1958.

As a result of the sex differences in trend, the excess of male over female mortality has risen rapidly. In 1929-1931, the excess ranged from 28 per cent at age 60 to 11 per cent at age 80. By 1958, it was as much as 107 per cent at age 60 and 32 per cent at age 80. It is worth noting, moreover, that at ages 60 to 70 the mortality rates for white males in 1958 were higher than those for white females in 1929-1931.

These recent shifts in mortality have their counterpart in the longevity record. For example, white females at age 60 had an expectation of life of 19.2 years in 1958; this marks a gain of 3.1 years since 1929-1931. At age 80, the remaining lifetime averaged 6.4 years in 1958, an increase of only 0.8 of a year. White males have not done as well. Their expectation of life at age 60 in 1958, namely, 15.7 years, was only one year greater than in 1929-1931. At age 80, the average remaining lifetime for white males increased to 5.8 years, a gain of just one half year. As in the case of mortality, the longevity record for white males in 1958 was much like that for white females in 1929-1931. When the recent longevity records for the two sexes are compared, it is seen that white females have an advantage of 3.5 years at age 60, almost two years at age 70, and a little more than one half year at age 80.

A reflection of the improvement in mortality and longevity is seen in the increased chances of older people to survive an additional 10 years. For those currently reaching age 65, the chances of living for at least another ten years are almost three in five for white males and three in four for white females. Even at age 75, the chances of survival for 10 years are still appreciable—almost one in three for white males and more than two in five for white females.

The improved record of longevity at the older ages reflects the remarkable advances in medicine and public health and their widespread applications. It also points up the new facet in the practice of medicine today.

DEATHS

Walker, William S., M.D., La Monte, a graduate of Barnes Medical College, 1903; member of Pettis County Medical Society; aged 88; died October 1.

Liersch, Joseph C., M.D., Kansas City, a graduate of the University of Kansas Medical College, 1913; member of Jackson County Medical Society; aged 70; died October 2.

Stahl, Phineas D., M.D., St. Louis, a graduate of Washington University School of Medicine, 1923; member of St. Louis Medical Society; aged 61; died October 2.

Allen, W. H., Jr., M.D., Hume, a graduate of Kansas City Medical College, 1897; member of West Central County Medical Society; aged 86; died October 5.

Johnson, Glenn D., M.D., Maysville, a graduate of Missouri University School of Medicine, 1919; member of Grand River County Medical Society; aged 70; died October 11.

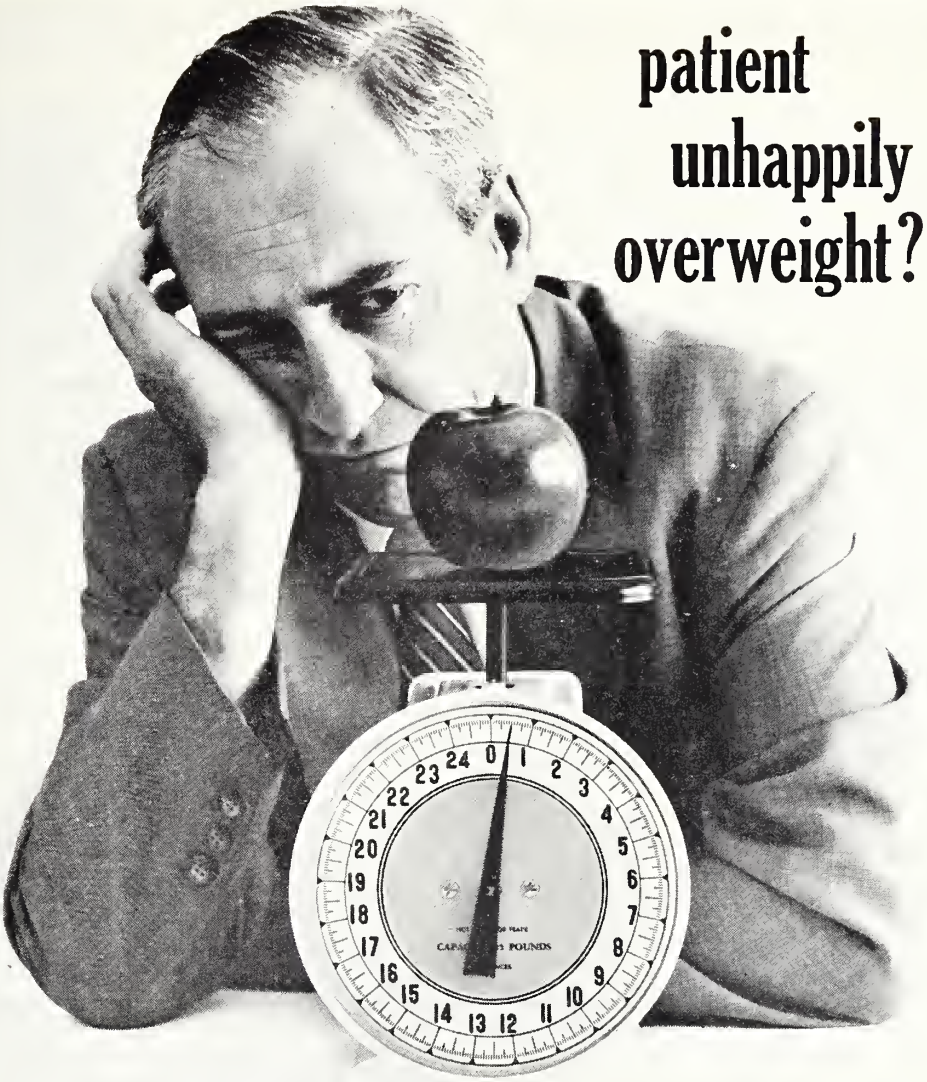
Ploehn, Emma, M.D., St. Louis, a graduate of Barnes Medical College, 1913; member of St. Louis Medical Society; aged 86; died October 18.

Levine, Ervan L., M.D., Vandalia, a graduate of Washington University School of Medicine, 1944; member of Marion-Ralls-Shelby County Medical Society; aged 40; died October 18.

Zimmermann, Carl A. W., M.D., Cape Girardeau, a graduate of Washington University School of Medicine, 1897; member of Cape Girardeau County Medical Society; aged 85; died October 22.

Flynn, Joseph E., M.D., Columbia, a graduate of the University of Iowa, 1938; member of Boone County Medical Society; aged 48; died October 23.

Cassidy, Leslie D., M.D., St. Louis, a graduate of St. Louis University School of Medicine, 1920; member of St. Louis Medical Society; aged 63; died October 24.



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[1] Douglas, H. S.: West. J. Surg. 59:238 (May) 1951.

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Ramblings of the Field Secretary

One hundred thirty persons attended the 13th annual dinner meeting of the Chariton-Macon-Monroe-Randolph County Medical Society held at the Moberly Country Club, Thursday night, October 13. This has become an outstanding annual affair at which time members of the medical society invite as their guests a number of lay friends and treat them to an excellent dinner and special program. The barbecued chicken served family style at this year's meeting was "fit for a king." Your correspondent took full advantage of his opportunity in respect to this delicacy. Following this delightful dinner the audience was privileged to hear an outstanding talk by Mr. Hurst John, an architect of Columbia, Mo., who related incidents of two visits to Dr. Albert Schweitzer in French Equatorial Africa.

Dr. Rowlette, Mr. John and Dr. Miller.

Doctors, their wives and guests had dinner preceding the program.

Mr. John, during the past three years, paid two visits to Dr. Schweitzer's jungle home and hospital in Lambariene where the doctor has served as a physician and surgeon for some 45 years. Mr. John stressed the dedication and deep concern of Dr. Schweitzer for the welfare and human dignity of others. He expressed in splendid fashion the inspiration that was his from the opportunity of visiting, talking to, and observing the activities of this great humanitarian. Mr. John is also a member of the Missouri Council of the Society of American Registered Architects.

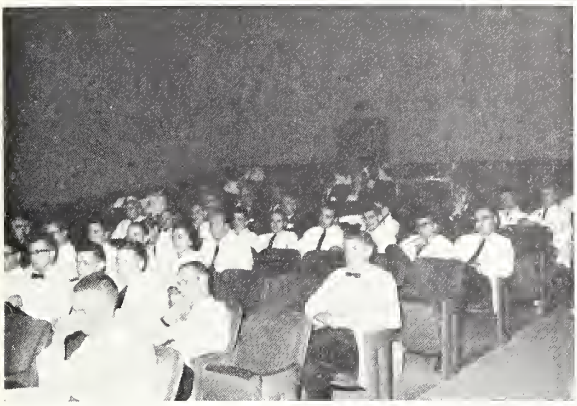
Howard S. Miller, M.D., Macon, President of the society, presided at the dinner and program. Local arrangements, which included appropriate decorations and that "kingly dinner," were handled by Josephine Baker, M.D., of Moberly, Secretary of the society. The chairman of the society's program committee is A. P. Rowlette, M.D., Moberly.

M.D. DAY

A first annual M.D. Day was held Friday, October 21 and Saturday morning, October 22, at the University of Missouri Medical School in Columbia. This affair was jointly sponsored by the Postgraduate Committee of the University of Missouri School of Medicine and the Medical Alumni Association of the University. The guest faculty included E. T. Bell, M.D., Professor Emeritus of Pathology, University of Minnesota School of Medicine, St. Paul, Minn.; C. H. Hatcher, M.D., Professor and Head, Division of Orthopedics, Stanford University School of Medicine,

Surgery Grand Rounds at the University of Missouri M.D. Day.

Palo Alto, Calif.; John F. Holt, M.D., Professor of Radiology, University of Michigan School of Medicine, Ann Arbor, Mich.; and William B. Goddard, M.D., Associate Professor of Obstetrics and Gynecology, University of Iowa School of Medicine, Iowa City, Iowa.



Obstetrics and Gynecology Grand Rounds was also held on M.D. Day.

In addition, a number of the members of the faculty of the University School of Medicine took part in the day and a half program. Approximately 100 physicians registered for the sessions. It is contemplated that this will become an annual affair and will be held on a week end at the medical center when the "MU Tigers" are playing football at home. (Incidentally, these Tigers added a fitting climax to a profitable, and I am sure, pleasant week end for those doctors who attended the full M.D. Day activities.)

The Saturday morning program at the medical center consisted of grand rounds organized by the Departments of Pediatrics, Obstetrics and Gynecology, Surgery and Medicine. The sessions on Friday consisted of papers and discussions presented by the guest faculty and by a number of faculty members of the University Medical School.

ELECTED TO LEGISLATURE

Luke A. Knese, M.D., St. Louis, Democrat, won reelection to the Missouri House of Representatives from the Fourth St. Louis District.

Jesse J. Wimp, M.D., Kirksville, Democrat, won reelection to the Missouri House of Representatives from Adair County.

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*J.A.M.A. 163: 359, 1957 (Feb. 2)

News—Personal and Professional

Recently appointed a member of the board of regents of the National Library of Medicine is **William L. Valk**, M.D., Kansas City.

At an annual meeting held in Kansas City, the Central Association of Obstetricians and Gynecologists elected **Gerald L. Miller**, M.D., Kansas City, as vice president.

Principal speaker at a meeting of the Missouri Association of Sanitarians held in Clayton in October was **H. M. Hardwicke**, M.D., Jefferson City.

The Kansas City Medical Society recently elected **James S. Johnson**, M.D., Kansas City, as its president.

The Osler Society of St. Louis City Hospital met October 19 and 20 with clinical sessions at Barnes, Firmin Desloge and City hospitals. **Robert E. Koch**, M.D., Clayton, is president, and **Martin G. Austin**, M.D., Webster Groves, is secretary.

"Problems in the Field of Mental Health" was the subject of a talk given by **Orr Mullinax**, M.D., Marshall, before students of Missouri Valley College late in September.

The appointment of **G. W. Winn**, M.D., Boonville, to the president's council of the Missouri State Chamber of Commerce was announced in October.

The medical staff of the Sweet Springs Community Hospital has elected **Charles A. Worley**, M.D., Sweet Springs, as president, and **Hugh S. Brady**, M.D., Concordia, vice president.

Speaker at the October meeting of the Maryville Business and Professional Women's Club was **E. D. Imes**, M.D., Maryville.

Speaker at the annual A. Morris Ginsberg Memorial Seminar of the Department of Medicine of the Menorah Medical Center on December 1 and 2 will be E. Grey Dimond, M.D., Director, Institute for Cardiopulmonary Diseases, Scripps Clinic and Research Foundation, LaJolla, California.

At a parakeet show held this fall at the Missouri Botanical Garden, first award went to **Juliette M. Eliscu**, M.D., Joplin.

Speaking and also moderating a question and answer period at a fall meeting of the Columbia Business and Professional Women's Club was **F. Gary Bivings**, M.D., Columbia.

In appreciation for services in the educational program, the American Academy of Ophthalmology and Otolaryngology recently presented an award to **Robert E. Ryan**, M.D., St. Louis.

At the fourth Dietary Institute held in Columbia early in October, **Thorpe Ray**, M.D., Columbia, was the banquet speaker and spoke on "Voodoo Medicine."

The Jasper County Unit of the American Cancer Society recently named **W. Russell Smith**, M.D., Carthage, as president.

The St. Louis Rheumatism Society had as speaker at a meeting on October 24 **Robert M. O'Brien**, M.D., St. Louis.

Among fellows of the American College of Surgeons inducted at its recent meeting in San Francisco were Drs. **Carl H. Calman**, Clayton; **John W. Payne**, Columbia; **Fred O. Tietjen**, Jefferson City; **Robert S. Brown, Samuel Kantor, William A. Leo, William B. McCunniff, Milton B. Ozar, Marion W. Richardson** and **Christopher Y. Thomas, Jr.**, Kansas City; **L. Marvin Roberts**, North Kansas City; **Eugene T. Hansbrough**, Poplar Bluff; **Drennan Bailey, Melvin A. Cassel, Caldwell J. Gaffney, James Y. Griggs, Irwin B. Horwitz, F. Patrick Lamb, Milton I. Lenobel, William T. Newton, Frank A. Palazzo, Kenneth D. Serkes, Arthur H. Stein, Jr.**, and **Robert E. Thomasson**, St. Louis.

A $100,000 scholarship loan fund to aid health students and technicians in medical fields is being established in the name of the late Joseph E. Flynn, M.D., according to an announcement by the Leukemia Guild.

SAUNDERS BOOKS

New!—A Manual and Atlas for the General Surgeon

Marble—The Hand

This unusual book is aimed at the needs of the general practitioner, general surgeon and industrial physician—the men who see hand injuries first. Full page plates and explicit text give you quick instructions on treating every type of hand injury you are likely to see—from *lacerations* and *puncture wounds* to *fractures* and *crushing injuries.*

Extensive coverage is given to closed injuries of the hand and their management: *contusions, swellings, avulsion of tendons, burns, sprains, frostbite, fractures and dislocations.* Open injuries are then considered. Beautiful drawings illustrate *methods of tendon advancement; repair of lacerated nerve; skin-graft; repair of traumatic amputation of finger; etc.* Separate chapters cover: splinting; infections; and tumors of the hand.

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☐ Artz & Hardy—Complications in Surgery & Their Management, $23.00.

Name______________________________

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SJG-12-60

New Members

Arthur I. Auer, M.D., 8505 Gannon St., St. Louis, has become a member of St. Louis Medical Society. Dr. Auer is a native of Missouri, received his preliminary education in Massachusetts, and his M.D. degree from Washington University School of Medicine in 1956. He is serving a residency at Veterans Administration Hospital, St. Louis.

R. E. Baska, M.D., Tri-County Clinic, Appleton City, has become member of West Central County Medical Society. Dr. Baska is a native of Kansas, received his preliminary education in Kansas, and his M.D. degree from Tulane University in 1959.

John B. Cadice, M.D., 6029 Harney Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Cadice is a native of Missouri, received his preliminary education in St. Louis, and his M.D. degree from St. Louis University School of Medicine in 1959. He is serving a residency at City Hospital, St. Louis.

LeRoy Dabbs, M.D., 1420 N. Taylor Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Dabbs is a native of Mississippi, received his preliminary education in Mississippi, and his M.D. degree from Meharry Medical College, Tennesssee, in 1917.

Donald E. Frein, M.D., 410 Ninth St., Warrensburg, has become a member of the Johnson County Medical Society. Dr. Frein is a native of Illinois, received his preliminary education in St. Louis, and his M.D. degree from St. Louis University School of Medicine in 1957.

Doris Gilpin, M.D., 6924 Millbrook, St. Louis, has become a member of the St. Louis Medical Society. Dr. Gilpin is a native of Iowa, received her preliminary education in Missouri and her M.D. degree from the University of Chicago Medical School in 1923.

Neville Grant, M.D., 114 N. Taylor Ave., St. Louis, has become a member of the St. Louis Medical Society. Dr. Grant is a native of Missouri, received his preliminary education in Connecticut and his M.D. degree from Columbia University College of Physicians and Surgeons, New York, in 1954.

William R. Green, M.D., 7200 Manchester Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Green is a native of Kentucky, received his preliminary education in Kentucky, and his M.D. degree from the University of Louisville School of Medicine in 1959.

Robert J. Gresick, M.D., 3210 Hampton Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Gresick is a native of Ohio, received his preliminary education in Ohio, and his M.D. degree from St. Louis University School of Medicine in 1955. He interned at St. Louis County Hospital.

Wilbert J. Henke, M.D., 9725 Hemlock Drive, St. Louis, has become a member of St. Louis Medical Society. Dr. Henke is a native of Missouri, received his preliminary education in Missouri, and his M.D. degree from St. Louis University School of Medicine in 1956. He interned at Firmin Desloge Hospital, St. Louis.

Paul H. Hilbert, M.D., 2905 Cherokee St., St. Louis, has become a member of St. Louis Medical Society. Dr. Hilbert is a native of Kentucky, received his preliminary education in Ohio, and his M.D. degree from St. Louis University School of Medicine, 1937.

William Leightner, M.D., 4755 Alaska St., St. Louis, has become a member of St. Louis Medical Society. Dr. Leightner is a native of Pennsylvania, received his preliminary education in Pennsylvania, and his M.D. degree from St. Louis University School of Medicine, 1956.

Thomas H. McGuire, M.D., Plaza Parkway Bldg., Kansas City, has become a member of the Jackson County Medical Society. Dr. McGuire is a native of Missouri, received his preliminary education in Kansas, and his M.D. degree from the University of Kansas Medical School, 1956.

Ralph E. MacNaughton, M.D., St. Joseph's Hospital, Kansas City, has become a member of the Jackson County Medical Society. Dr. MacNaughton is a native of Texas, received his preliminary education in Kansas, and his M.D. degree from the University of Kansas Medical School, 1954.

Seymour Reichlin, M.D., 333 Westgate Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Reichlin is a native of New York, received his preliminary education in New York, and his M.D. degree from Washington University School of Medicine in 1948.

Arthur A. Smith, M.D., 25 McNulty Drive, Florissant, has become a member of St. Louis Medical Society. Dr. Smith is a native of Missouri, received his preliminary education in Arkansas and his M.D. degree from St. Louis University School of Medicine, 1958.

Druery R. Thorn, M.D., St. Luke's Hospital, Kansas City, has become a member of the Jack-

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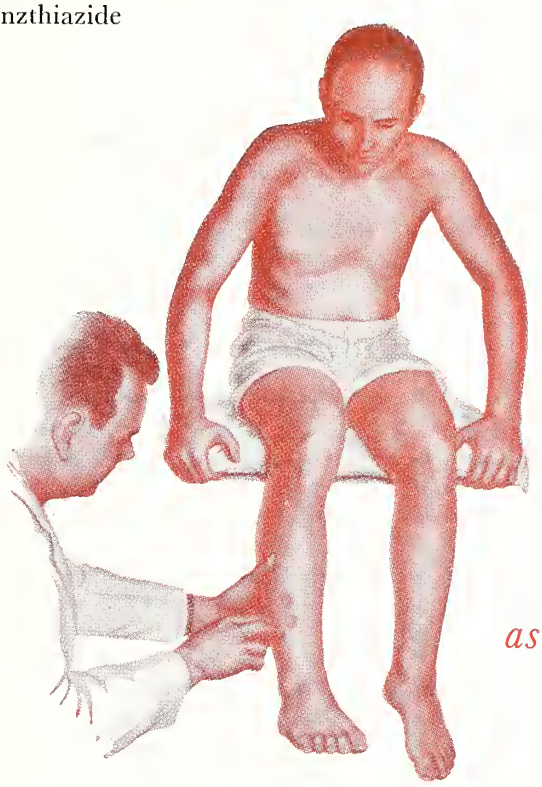

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References: 1. Pitts, R. F., Am. J. Med., 24:745, 1958. 2. Ford, R. V., Cur. Therap. Res., 2:51, 1960.

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RICHMOND 20, VIRGINIA

son County Medical Society. Dr. Thorn is a native of Missouri, received his preliminary education in Missouri and his M.D. degree from Duke University, North Carolina, 1957.

Dominic F. Tutera, M.D., Plaza Medical Bldg., Kansas City, has become a member of the Jackson County Medical Society. Dr. Tutera is a native of Missouri, received his preliminary education in New York, and his M.D. degree from St. Louis University School of Medicine, 1956.

James H. Utley, M.D., 4483 Enright Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Utley is a native of Tennessee, received his preliminary education in Tennessee, and his M.D. degree from Meharry Medical College in 1955. He interned at Homer G. Phillips Hospital, St. Louis and served a residency there also.

James W. Walsh, M.D., 3720 Washington Ave., St. Louis, has become a member of St. Louis Medical Society. Dr. Walsh is a native of Illinois, received his preliminary education in St. Louis, and his M.D. degree at Washington University School of Medicine, 1954.

John H. Wells, M.D., 3718 Prospect Ave., Kansas City, has become a member of the Jackson County Medical Society. Dr. Wells is a native of Texas, received his preliminary education in Canada, and his M.D. degree at Meharry College, 1950. He completed a residency at General Hospital, St. Louis.

WOMAN'S AUXILIARY

(Continued from page 1464)

these visits, viewed through memory's eyes, bring a vision of roads and streets decked in autumn splendor, of groups of friendly doctors' wives who are so much fun to be with, and who are so beautiful and intelligent and ambitious, just as we have found them all over our State of Missouri. Now we are ready to settle down and prepare for Christmas.

Let's deck the halls and light the Christmas candles, prepare the feast and sing the beloved carols! To the hundreds of Auxiliary members I have met, and to the hundreds I hope soon to meet—Merry Christmas!

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NEX Acetyl Pediatric Suspension, cherry-flavored, 250 g. sulfamethoxypyridazine activity per teaspoonful (5 cc.). ttles of 4 and 16 fl. oz. Recommended Dosage: Children ider 80 lbs.: 1 teaspoonful (250 mg.) for each 20 lb. body eight, the first day, and ½ teaspoonful per 20 lb. per day ereafter. For children 80 lbs. and over: 4 teaspoonfuls .0 Gm.) initially and 2 teaspoonfuls daily thereafter. Give mediately after a meal.

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NEW—for acute G.U. infection AZO-KYNEX® Phenylazodiaminopyridine HCl—Sulfamethoxypyridazine Tablets, contains 125 mg. KYNEX in the shell with 150 mg. phenylazodiaminopyridine HCl in the core. Dosage: 2 tablets q.i.d. the first day; 1 tablet q.i.d. thereafter.

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Councilor District News

FIRST COUNCILOR DISTRICT

DONALD M. DOWELL, CHILLICOTHE, COUNCILOR

Buchanan County Medical Society

The October 12 meeting of the Buchanan County Medical Society was held in the Oak Room of Hotel Robidoux in St. Joseph. Forty-five local and area doctors attended. Dr. Thompson E. Potter, President of the society, presided.

The program was presented by Dr. Manson D. Pettit, Superintendent of the State Hospital at St. Joseph, who discussed "Modern Concepts of State Hospital Functions." Dr. Pettit summarized the various procedures under which patients are admitted and committed to the state hospital. He pointed out the need for a preadmission clinic in St. Joseph and other places where patients could undergo psychiatric examination rather that giving them tests at a mental hospital. He stated that in many cases out-patient clinics could handle a great deal of work of preadmission examinations and periodic check-ups on patients released from the mental hospital.

Dr. George W. Forman acted as discussion leader following the talk by Dr. Pettit.

William B. Rost, M.D., *Secretary*

Grand River Medical Society

The Grand River Medical Society held its monthly meeting at the Strand Hotel in Chillicothe on October 13. There were approximately 45 members and wives present. Guests included Mrs. Jordan Kelling, Waverly, State President of the Woman's Auxiliary; and Dr. and Mrs. R. A. McCanse of Kansas City.

The scientific program was conducted by Dr. McCanse who discussed "Orthopedic Emergencies." Following the formal presentation, there was a question and answer period. The physicians present felt the program was quite profitable.

Following the scientific meeting, the regular business meeting was held.

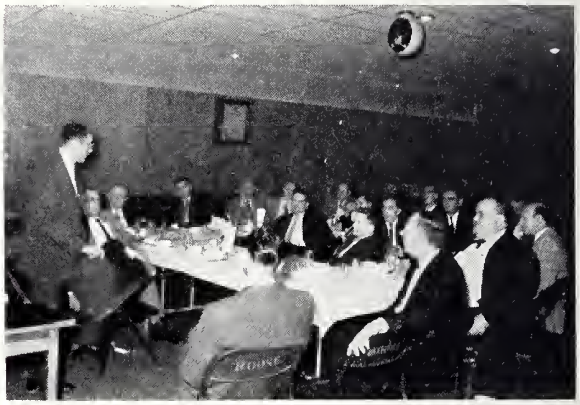
B. D. Howell, M.D., *Secretary*

SECOND COUNCILOR DISTRICT

J. J. WIMP, KIRKSVILLE, COUNCILOR

Marion-Ralls-Shelby County Medical Society

Twenty physicians attended a dinner meeting of the Marion-Ralls-Shelby County Medical Society at the Moose Lodge in Hannibal on Tuesday night, October 18.



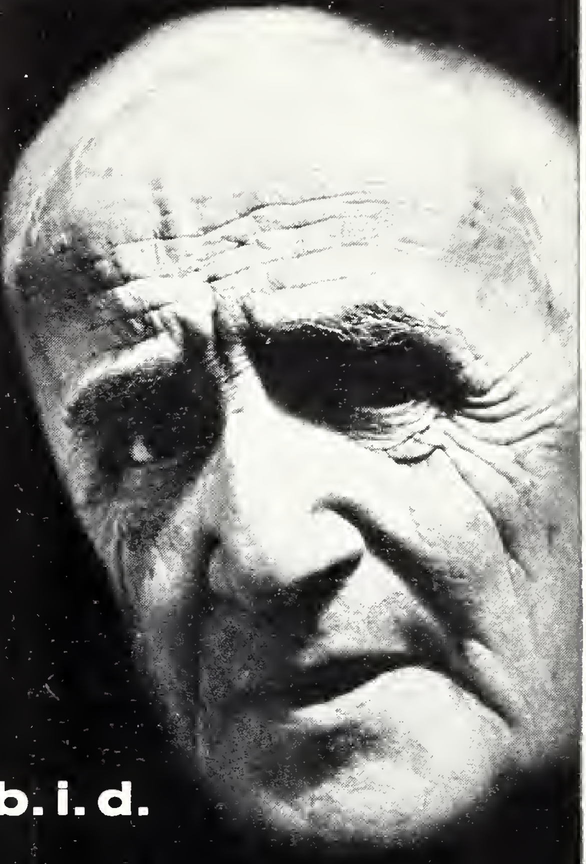
Dr. Carlin was the speaker.

Following an enjoyable social hour and an excellent chicken dinner, the group was privileged to hear an interesting discussion by M. Richard Carlin, M.D., urologist of St. Louis, on "The Management of Some Common, Troublesome GU Problems."

Doctors pose for picture taken by the Field Secretary.

His discussion was well received and provoked many questions and additional comments from the audience. The program was sponsored by the Missouri Academy of General Practice.

Wyeth Hamlin, M.D., *Secretary*



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SIXTH COUNCILOR DISTRICT

O. B. BARGER, HARRISONVILLE, COUNCILOR

West Central Missouri Medical Society

The West Central Missouri Medical Society held its regular monthly meeting at the Wagon Wheel Cafe, Harrisonville, Thursday evening, October 13, with the usual social hour and a delicious steak dinner preceding the formal program.

The scientific talk was presented by Dr. Robert Mosser of Independence, Missouri, who discussed "Coronary Heart Disease" with special reference to the use of some of the newer drugs. Dr. Mosser made a fine presentation of his subject which brought forth numerous questions which is always complimentary to the speaker. We are grateful to Dr. and Mrs. Mosser for making the trip to Harrisonville to meet with us.

Business matters were as follows:

The credentials committee submitted the application for membership of Dr. R. E. Baska, of Appleton City, who has recently joined the Tri-County Clinic of that city. His application was approved.

Dr. O. B. Barger, Harrisonville, Councilor for our district, made some comments regarding the Medical Student Loan Fund which the Council of the Missouri State Medical Association has set up in the sum of $25,000. He also brought up the matter of the A.M.E.F. It was moved by Dr. Roy Pearse, seconded and passed, that this society send in a check to the A.M.E.F. marking it for the University of Missouri Medical School.

It was moved by Dr. Ecklund, seconded and passed, to instruct the treasurer to reimburse Drs. Wray and Pearse, of Nevada, for the $100 which they paid to the Nevada Country Club for the sole use of the club at the last meeting when the "Athletic Injury" program, sponsored by the University of Missouri Medical School, was presented. This was an excellent program. Coaches from our area, and adjacent areas were there in full force and all expressed their appreciation of the program and hoped that it would be an annual fall affair. Our society is seriously considering making it an annual affair just before the opening of the football season.

It was moved, seconded and passed to have the next meeting of the society in Nevada, in November, and to hold the December meeting in Butler. Butler is more in the center of the area and we hope to get a good turn out of members for the annual election of officers and Christmas program which will be non-scientific.

Those in attendance were: Dr. Roy Pearse, Nevada; Drs. C. W. Luter and A. L. Hansen, Butler; Dr. and Mrs. Robert Brownsberger, and Dr. and Mrs. R. E. Baska, Appleton City; Dr. and Mrs. B. O. Hartwell, Drexel; Dr. Eckland of Pleasant Hill; Dr. and Mrs. O. B. Barger and Dr. and Mrs. Jack Moody, Harrisonville.

Carter W. Luter, M.D., *Secretary*

EIGHTH COUNCILOR DISTRICT

W. W. TILLMAN, SPRINGFIELD, COUNCILOR

Greene County Medical Society

The regular meeting of the Greene County Medical Society was held Friday, September 23, 1960, 6:30 p.m. at the Holiday Inn, with 44 members and three guests present. Dr. Walter W. Tillman, Jr., the President, presided.

Upon motion by Dr. Lemmon, seconded by Dr. Wood, the minutes of the June meeting were approved as published in the *Bulletin.*

Dr. Tillman discussed the annual meeting of the Association of American Physicians and Surgeons, September 29 to October 1, 1960, at the Sheraton-Jefferson Hotel in St. Louis with Mr. Barry Goldwater scheduled as the banquet speaker. He also discussed the United Fund Drive within the Medical Society and announced that Dr. William F. Johnson is serving as chairman of this activity. Dr. Tillman then introduced Mr. Max VanHook, Co-Chairman of the Springfield United Fund Drive, who discussed "Springfield and the Chapter Plan," a new approach to the United Fund.

It was announced that the 13th Annual Greene County Medical Society Handicap Golf Tournament would be held Thursday, September 29, 1960, at Hickory Hills Country Club with all members of the society invited to participate.

Dr. Tillman discussed the third annual Doctor-Lawyer Golf Tournament scheduled for Thursday, October 6, 1960, at Twin Oaks Country Club and urged all members of the society to participate.

The President urged all members of the society not registered to vote, to register prior to October 10, 1960, at the County Clerk's office. He also announced that those not meeting the residence requirements would still be able to vote for the offices of President and Vice President in the election if they have lived in the

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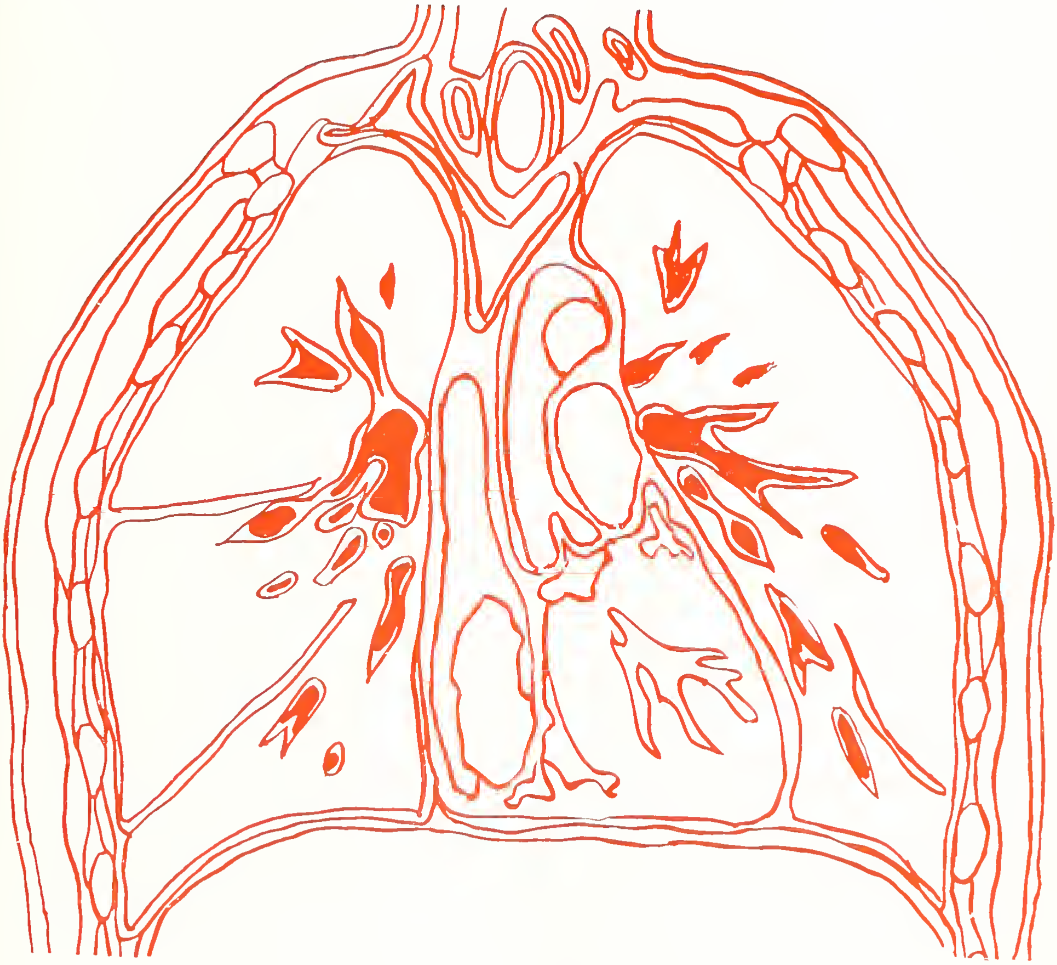

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county 60 days, those meeting this requirement may cast their ballot at the County Clerk's office.

Drs. Kenneth Knabb and Bruce Lemmon discussed the Christian Counseling Service and urged the members of the society to take advantage of this service. Dr. Tillman again expressed appreciation to Dr. James T. Brown and the members of the cast of the Medical Hit Parade Shows for the many appearances they are making before medical organizations throughout this part of the country and for the work they have done in promoting the sale of the records, "Borborygmi" and "Plancenta Preview," which have resulted in the $13,000 in profits being made available for scholarships and loans to medical students.

Dr. Brown, a member of the Program Committee, introduced Mr. Leo E. Brown, Director of the Communication Division of the American Medical Association, who discussed "Mirage of Medicine."

Following Mr. Brown's presentation, Dr. Tillman expressed appreciation to him for his appearance before the society and his excellent presentation.

The President announced that the October 28 regular meeting of the society will be a joint meeting with the members of the Greene County Bar Association at which time Mr. Joseph Stetler, Director of the Law Department of the American Medical Association, will discuss "Medical-Legal Understanding." He urged all members of the society to be present at this meeting.

There being no further business, the meeting was adjourned.

F. T. H'DOUBLER, JR., M.D., *Secretary*

Ozarks Medical Society

The Ozark Medical Society met on October 11 at the Rainbow Dinner House in Cassville, with 31 members and auxiliary members present. The program consisted of two dramatic readings by local high school speech students.

At the business meeting which followed, it was announced that the next meeting will be held at Zeke's Cafe in Aurora at 7:00 p.m. on November 8, and the program will be announced through notices to the membership.

A. J. GRAVES, M.D., *Secretary*

NINTH COUNCILOR DISTRICT

E. A. STRICKER, ST. JAMES, COUNCILOR

Mid-Missouri County Medical Society

A dinner meeting of the Mid-Missouri County Medical Society and the doctors' wives was held at the Colonial Village in Rolla on Thursday night, October 27. Physicians and their wives from Fort Leonard Wood were also invited and some were in attendance.

The scientific program for the evening sponsored by the Missouri Academy of General Practice presented Richard Carlin, M.D., of St. Louis, Department of Urology, Washington University Medical School, who spoke on "The Management of Some Common, Troublesome GU Problems." Dr. Carlin discussed in a practical manner a number of such problems which are seen day by day in the general practitioner's office. It was a practical and interesting discussion of an important subject.

M. K. UNDERWOOD, M.D., *Secretary*

TENTH COUNCILOR DISTRICT

BEN M. BULL, IRONTON, COUNCILOR

Butler-Ripley-Wayne County Medical Society

The Butler-Ripley-Wayne County Medical Society met for a dinner meeting at the Hickory House Restaurant, Poplar Bluff, at 6:30 p.m., on October 5, 1960.

Dr. Tom Burcham, Jr., of Doniphan, was accepted into the medical society as a member. The scientific portion of the program was presented by Dr. James Janney and Dr. George Duane, of St. Louis, on "New Drug Therapy in Hypertension." They presented the work-up of a hypertensive case, stressing the importance to be sure that the patient is a hypertensive and not one with a temporary elevation. They went through the complete array of hypertensive drugs, their indications illustrated by case histories.

There were many questions from the audience. The presentation was thoroughly enjoyed by the largest turn-out that the medical society has had in many months.

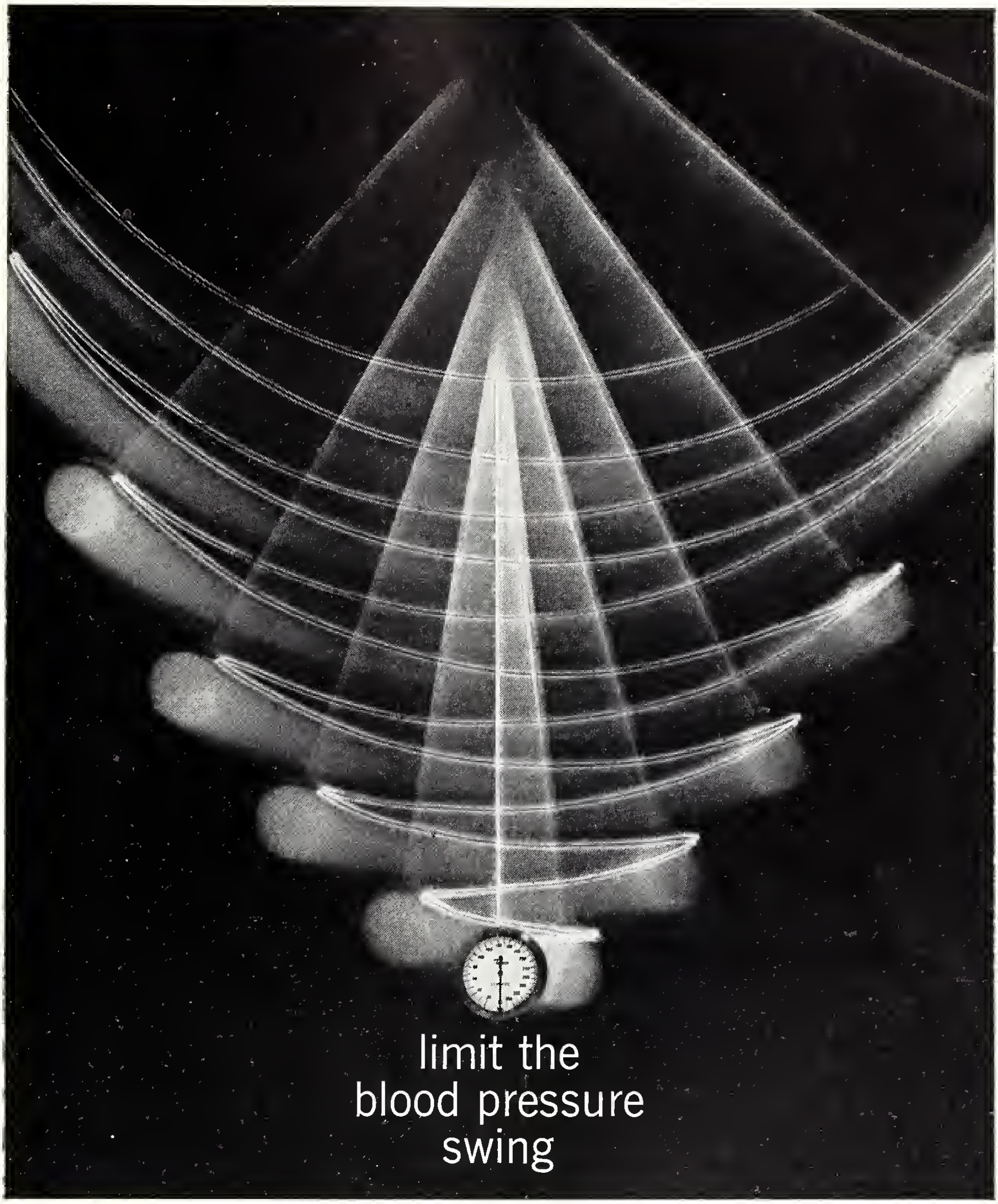
The meeting was adjourned at 9:30 p.m.

E. T. HANSBROUGH, M.D., *Secretary*

Mineral Area County Medical Society

A joint dinner meeting of the Mineral Area County Medical Society and the members of the 24th judicial circuit of the Bar Association in Missouri was held at the Country Club at Farmington, on Thursday night, October 27.

Thirty persons attended this interesting affair, evenly divided between doctors and lawyers. The 24th judicial circuit includes the counties of St. Francois, Madison, Ste. Genevieve and



Rautrax-N lowers high blood pressure gently, gradually . . . protects against sharp fluctuations in the normal pressure swing. Rautrax-N combines Raudixin, the cornerstone of antihypertensive therapy, with Naturetin, the new, safer diuretic-antihypertensive agent. The complementary action of the components permits a lower dose of each thus reducing the incidence of side effects. The result: Maximum effectiveness, minimal dosage, enhanced safety. Rautrax-N also contains potassium chloride — for added protection against possible potassium depletion during maintenance therapy.

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Informal discussion followed the meeting.

Perry; while the Mineral Area County Medical Society includes the counties of St. Francois, Iron, Madison, Washington, Reynolds and Ste. Genevieve.

The evening festivities began with a social hour where friendly discussion was the order of the evening. An excellent steak dinner was served and then the audience viewed a showing of the film entitled, "The Medical Witness." Following the film presentation a general discussion was held which concerned various medical-legal problems of much interest to both groups. Some of these problems included questions as to proper legal consent for doing autopsies under various circumstances; can married minors legally give consent for operations upon themselves or their children, and similar question.

An attorney enters into the discussion.

It was suggested by the legal group that if doctors desired to develop a series of such questions and present them to the legal group for study, they could then have another joint meeting later and go into the answers in better fashion. It was also proposed that another joint meeting be held and at such time the topic of discussion be concerned with the rating of the degree of disability on various types of injuries. This matter is of considerable concern to both physicians and lawyers.

Dinner preceded the program.

The interest shown and enjoyable fellowship experienced in this joint meeting will be big factors in the promotion of similar meetings, from time to time, between the doctors and the lawyers of the area.

Mr. Ray McIntyre, Field Secretary of the State Medical Association, was a guest of the local medical society at the meeting.

George L. Watkins, M.D., *Secretary*

WINE...

℞ Now widely prescribed for the chronic
invalid, the convalescent,
the debilitated oldster

Physicians treating the aged and the convalescent have for generations been aware of the restorative power of wine. However, it remained for recent research* to more clearly define its clinical physiological action.

Wine Increases Appetite—Goetzl and co-workers[1] observed a profound stimulating effect on olfactory acuity and appetite, even in anorexia.

Wine Aids Gastric Digestion—Ogden and Southard[2] reported a significant increase in gastric secretion following ingestion of moderate amounts of table wine.

Wine Helps in Cardiology—Prudent quantities of wine are helpful[3] in counteracting depression, anxiety and discomfort in sufferers from heart and coronary disorders.

Wine—"safest of all sedatives..."[4]—A little Port or Sherry at bedtime offers a valuable relaxant to the insomniac and may obviate the need for drug-sedative medication.

In brief, wine taken with discretion adds greatly to the pleasures of the table, to physical comfort and to mental serenity in the aged, as well as in the chronic sufferer and the convalescent.

Research information on wine is available on request. Write for your copy of *"Uses of Wine in Medical Practice." Wine Advisory Board, 717 Market Street, San Francisco 3, California.

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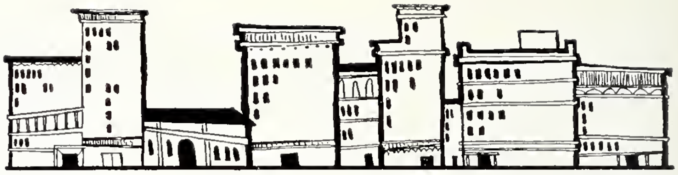
1. Goetzl, F.R.: Permanente Found. M.Bull. *8*:72 (April) 1950.
2. Ogden, E., and Southard, F.D., Jr.: Fed. Proceedings *5*:77 (1946)
3. Brooks, H.: Med. J. & Rec. *127*:199 (1928)
4. Haggard, H.W., and Jellinek, E.M.: Alcohol Explored, New York, Doubleday, Doran, 1942.

From the Medical Schools



UNIVERSITY OF MISSOURI

Psychiatric Ward Opened

The new psychiatric ward in the Medical Center was officially opened for use Monday, Oct. 17, with provisions for all modern methods of psychiatric treatment, including individual and group psychiatric treatment, including individual and group psychotherapy and appropriate medicines, with 18 beds.

Dr. James M. A. Weiss, associate professor of psychiatry and acting chairman of the department, and Dr. David Davis, assistant professor of psychiatry, will have supervision of the new ward.

Dr. Weiss said that the ward will be purely a psychiatric ward of the type found in general hospitals, and designed to take care of "moderate emotional and mental disorders which require hospital care but not restraint." He said it will be an open ward with no locked doors, on the basis of research in the last ten years in both the United States and England, which has shown that the open psychiatric ward has proved most successful.

Further, Dr. Weiss said, the ward has been equipped in the most modern manner, with attractive rooms, some of which are furnished in a home-like manner in order to give patients as much a feeling of home-life as possible.

The ward will not accept for care patients who are so disturbed mentally that they require restraint; such patients will be referred to a state or private mental hospital for treatment.

Patients will be accepted for treatment in the psychiatric ward only on the referral of their private physician, as is the practice in accepting patients for the rest of the University Hospital.

Dr. Weiss said it is hoped to use the ward only for "short term cases, people who may be treated in the hospital in a few days to six weeks," and that it is expected none will be kept there longer than three months. He said that the "intention is to return as many patients as possible to their normal lives and activities." In the treatment of psychiatric patients, there will be activity programs that will include group discussions and recreation therapy.

High Resolution Electron Microscope Purchased

The Board of Curators of the University has authorized the purchase for $32,479.50 of a new high resolution electron microscope for interdepartmental use in ultramicroscopic research at the University.

Purchase of the electron microscope has been made possible by a grant of $45,000 from the National Science Foundation. The grant will also provide for micro-photographic equipment, microtomes for preparing ultra-thin specimens for study, and other accessories.

The new instrument will be bought from the Radio Corporation of American on the basis of a bid of $32,479.50 entered by RCA when bids were received last July 28. Included in the purchase price are a high vacuum evaporator for use with the microscope; complete service and parts for one year; and supervision of the installation of the microscope.

The microscope will be installed in the third floor of the Medical Sciences Building at the Medical Center, where adequate space for a laboratory for the preparation of specimens, a room for the microscope, and a dark room for processing plates and micrographs will be available. Dr. Jona D. Thaemert, assistant professor of anatomy and an experienced electron microscopist, will have direction of the microscope.

Research projects that will be greatly helped by having ultra-microscopic facilities available are being carried on at present in the departments of anatomy, microbiology, radiology, horticulture and geology. One basic instrument of the type being acquired is expected to serve the immediate ultra-microscopic needs of these departments, but Dr. Thaemert said it will be necessary to allocate the time of the microscope among the researchers. Because of the extreme sensitivity of the instrument it will be operated only by persons experienced in electron microscopy.

The instrument will take electron micrographs on either 35 mm. film or plates. It also has a fluorescent viewing screen approximately five inches square on which the magnified image can be viewed directly. In addition a binocular

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REFERENCES:

1. Scherbel, A. L.; Schuchter, S. L., and Harrison, J. W.: Cleveland Clin. Quart. 24:98, April, 1957.
2. Waine, Hans: Arthritis, rheumatoid, in Conn, H. F.: Current Therapy 1959, Philadelphia, W. B. Saunders Co., 1959, p. 565.

*Planolar, trademark

stereomicroscope with a magnification of seven times may be placed in such a position as to allow the image seen on the screen to be additionally magnified.

The electron microscope being acquired by the University will produce screen images or electron micrographs which show particles of a diameter as little as 20 Angstrom units or separated by a distance of only 20 Angstrom units.

First Annual M.D. Day Held

The first annual M.D. Day was held at the Medical Center Oct. 21 and 22, to initiate a series of annual scientific sessions for all medical alumni of the University and all medical doctors in Missouri.

M.D. Day was sponsored by the School of Medicine and the University of Missouri Medical Alumni Association. Approximately 3,500 Missouri medical doctors as well as all University medical alumni in Missouri and outside the state were invited to the first meeting.

The scientific session that was the principal event of the program was held all day Oct. 21, starting at 9:00 a.m., in the Medical Center Auditorium, and consisted of seven talks and a panel discussion on medical problems of current interest. The University of Missouri Medical Alumni banquet was held that evening at the Daniel Boone Hotel, following a social hour. On Saturday, the 22nd, participants were taken on a morning tour of the departments of pediatrics, obstetrics and gynecology, surgery, and medicine. The Medical School Alumni Board of Governors also met at 10:30 a.m.

Participants in the scientific session included a guest faculty of four out-of-state medical men who were among the speakers, discussing subjects of their fields of specialization. The guest faculty members and their topics are: E. T. Bell, M.D., professor emeritus of pathology, University of Minnesota School of Medicine, St. Paul, "A Clinical and Pathological Study of 2,500 Cases of Diabetes Mellitus"; C. Howard Hatcher, M.D., professor and head of the division of orthopedics, Stanford University School of Medicine, Palo Alto, Calif., "Skeletal Lesions of Childhood Which Simulate Bone Sarcomas"; John J. Holt, M.D., professor of radiology, University of Michigan School of Medicine, Ann Arbor, "Pitfalls in the Roentgen Evaluation of the Growing Skeleton"; and William B. Goddard, M.D., associate professor of obstetrics and gynecology, University of Iowa School of Medicine, Iowa City, "The Diagnosis and Treatment of Third Trimester Bleeding."

The other speakers on Friday, Oct. 21, all of whom are on the University faculty, and their subjects were: Fred V. Lucas, M.D., professor of pathology, "Aldosterone in Hypertension"; James M. A. Weiss, M.D., associate professor of psychiatry and acting chairman of the department, "Psychiatric Problems of Aging"; and Norman D. Asel, M.D., associate professor of dermatology, "Griseofulvin in the Treatment of Superficial Fungus Diseases."

Members of the panel discussion, on "Pediatric Growth Problems," were Constantine S. Anast, M.D., associate professor of pediatrics, moderator; Dr. Hatcher; Dr. Holt; and Theodore E. Keats, M.D., professor of radiology.

Dean Vernon E. Wilson extended a welcome to the M.D. Day participants. John H. Landor, M.D., assistant professor of surgery at the Medical Center, presided over the morning scientific discussions, and David G. Hall, III, M.D., assistant professor of obstetrics and gynecology, presided in the afternoon.

Dr. John McHaney, Jefferson City, president of the Missouri Medical Alumni Association, was in charge of the banquet, which was sponsored by the Alumni Association.

Attend St. Louis Meeting

Dr. M. H. Ivey, assistant professor of microbiology, was among several Medical Center and University staff members who participated in the 77th meeting of the Eastern Missouri Branch of the Society of American Bacteriologists Oct. 18 in the Wohl Health Center, in St. Louis.

Dr. Ivey took part in the scientific program with a presentation on "Strain Variations of Trichomonas Vaginalis." Dr. James T. Barrett, associate professor of microbiology, is secretary-treasurer of the Eastern Missouri Branch of the Society of American Bacteriologists, and attended the meeting as well as other representatives from the department of microbiology.

First Showing of Scientific Film

A motion picture produced in color and sound by Dr. Jack M. Martt, associate professor of medicine, was shown for the first time Oct. 13, in Fort Dodge, Ia.

The film, titled "Diagnosis of Common Congenital Heart Defects," was shown and discussed by Dr. Martt, also director of the Heart Station at the Medical Center, at the Physicians' Seminar of Cardiovascular Diseases, which was held in connection with a meeting of the Iowa Heart Association.

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reviews several common heart defects with which one is born and shows how to diagnose these defects and handle the person. It also points out the characteristic features of the defects.

Produced in the cardiovascular laboratory of the Medical Center the film shows photographs of patients who have heart defects. Dr. Martt wrote the script and produced the motion picture. What makes this different from other films, according to Dr. Martt, is that it covers several heart defects while other films of this nature only review one type of defect.

The film will also be used for teaching purposes in the School of Medicine, and will be made available to other institutions. Dr. Martt also showed the film at the national meeting of the American Heart Association on Oct. 21-22 in St. Louis.

Awards Convocation Held

Thirteen students in the University of Missouri School of Medicine were presented undergraduate awards for outstanding scholarship, during a special Awards Convocation held at 4:00 p.m. October 20 in the Medical Center Auditorium.

The awards, recipients, and home towns of recipients or their families follow:

James S. Rollins Scholarship, a $50 stipend awarded in recognition of merit and character, to Clarence Ridenhour, RFD 1, Belle, Mo.

University of Missouri Medical School Foundation Scholarship, a $50 stipend awarded for excellence in scholarship and in scientific leadership, to Ann Johanson, 429 Sherwood Drive, Webster Groves, Mo.

Dr. John C. Parrish Medical Scholarship Fund third-year medical student scholarship, a $250 stipend awarded for scholarship and character, to George M. Pavey, 417 Frieda, Kirkwood, Mo.

Dr. John C. Parrish Medical Scholarship fourth-year medical student scholarship, a $125 stipend awarded for scholarship and character, to John Townsend, 919 West Broadway, Columbia, Mo.

Gold Watch Award, to Leonard Politte, Bismarck, Mo., for outstanding scholarship.

Medical Biochemistry Award, a book from the Department of Biochemistry, to Roberta L. Lowry, Mercer, Mo., for the best performance in biochemistry studies.

Biophysics Honor Award, from royalties from a biophysics textbook by Dr. James E. Randall, associate professor of physiology and biophysics, to Roberta L. Lowry, Mercer, Mo., and Larry A. Ozenberger, 2316 Lovers Lane, St. Joseph, Mo., for the best performance in biophysics studies.

Book Awards, to Thomas Kirk, 1157 Wilson Ave., University City, Mo.; Donald Simmons, RFD 3, Pleasant Hill, Mo.; James Harms, 508 East Fourth, Salisbury, Mo.; Sue A. Marten, Midridge, Mo.; and Larry Millikan, 610 Highway 63 South, Columbia, Mo., for outstanding scholarship.

The awards, except for those in biochemistry and biophysics, were presented by Dr. Theodore Keats, professor of radiology, who is chairman of the Scholarships and Awards Committee of the School of Medicine. Dr. Randall presented the biophysics award, and Dr. Thomas D. Luckey, professor of biochemistry and the chairman of the department, presented the Medical Biochemistry Award.

Library Service Installed for Patients

Library delivery service to help provide reading material for patients has been started at the University of Missouri Hospital. Four days each week—Tuesday, Wednesday, Thursday, and Friday—a "visiting" librarian makes the rounds of the hospital wards with a cart loaded with books and periodicals to deliver publications previously requested, accept new requests, or permit patients to select reading matter from the mobile rack.

The new library service is a cooperative program of the University Library and its Medical Library branch in the Medical Center; the Columbia Public Library, the service center for the Daniel Boone Regional Library, and the University Hospital. It was inaugurated recently after several months of planning and preparation.

Dr. Eisenstark Visits Microbiology

Professor A. E. Eisenstark was a guest of the department of microbiology here at the Medical Center and presented a seminar entitled "What Do Genes Do?" on October 10.

Dr. Eisenstark received his Ph.D. degree from the University of Illinois where he conducted microbial research with the Electron Microscope. He is now professor of bacteriology at Kansas State University and is engaged in research concerned with microbial genetics.

To Serve on Editorial Boards

Dr. Robert L. Jackson, professor of pediatrics and chairman of the department, has been invited to serve on the editorial board of *Diabetes: The Journal of the American Diabetes Association* for a three-year term, and to be a member

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of the editorial advisory board of the ADA *Forecast,* on a rotating three-year appointment basis.

Diabetes is published bimonthly by the American Diabetes Association, Inc., providing an official journal for the association and furnishing the medical profession with information concerning diabetes and related fields of medicine. *Forecast* is a pocket-size magazine, also published bimonthly by the American Diabetes Association, Inc., New York.

Attend Meetings

Dr. John A. Buesseler, chief of ophthalmology and acting chairman of the department of surgery, participated in the American Board of Ophthalmology examinations as an examiner Oct. 6-7 in the Palmer House in Chicago.

Dr. Buessler also presented a postgraduate course on "Ophthalmic Radiology Diagnosis" on Oct. 11 before the meeting of the American Academy of Ophthalmology and Otolaryngology in the Palmer House. Dr. J. B. Strauss, 2nd year resident and instructor in ophthalmology, also attended the meeting from Oct. 9 to 14.

On Oct. 12 Dr. Buesseler left Chicago for the American College of Surgeons meeting, in San Francisco Oct. 10 through 14. The San Francisco meeting was attended by several other representatives from the department of surgery. Dr. Buessler, Dr. Almond, assistant professor of surgery, and Dr. Garth Russell, research associate in surgery (ophthalmology), were in charge of a scientific exhibit on tissue preservation at the meeting in San Francisco. The exhibit portrayed the Missouri Lions Clubs' sponsorship of the University Eye Tissue Bank.

Four University of Missouri Medical Center faculty members attended and participated in the Frederick A. Coller Surgical Society Meeting in Reno, Nevada, October 6 through 8. Dr. Almond, a member of the society, Dr. Ian Thompson, associate professor of surgery (urology), a guest of Dr. Almond; Dr. Karl Moedl, assistant instructor in surgery and chief resident in surgery, and Dr. Earl J. Wiphler, assistant instructor and resident in surgery attended the meeting.

Dr. Moedl presented a paper entitled "Review of Small Bowel Tumors" in conjunction with Dr. Almond and Dr. Wiphler presented a paper on "Intravenous Aortography" in conjunction with Dr. Almond and Dr. Thompson.

Appointments in the Department of Surgery

Dr. Charles Bradbrook joined the ophthalmology staff as a third year resident and assistant instructor in ophthalmology on September 26, 1960.

Dr. Jerome Frankel was appointed by the Board of Curators for a third year residency and assistant instructor in ophthalmology position starting October 15, 1960.

Office of the Dean

Dr. Vernon E. Wilson, Dean and Director of the Medical Center, attended the meeting of the Missouri Council of Churches in Jefferson City, October 10, and presided at the morning session of the annual meeting held at the Methodist Church during the session of the Division of Mental Diseases. The morning session on October 10 of the two-day meeting was the Division of Mental Diseases with the following speakers: Dr. Addison M. Duval, Director of the Division of Mental Diseases; Dr. Louis H. Kohler, Superintendent of the St. Louis State Hospital; and Mr. Francis Smith, Chairman of the State Mental Health Commission.

Dr. Wilson attended the dedication of the University of Kentucky Medical Center at Lexington, September 23 and 24.

Anatomy

Dr. J. C. Thaemert, assistant professor of anatomy, was guest speaker at the meeting of the Columbia Dental Association at the Daniel Boone Hotel, Oct. 12, 1960. Dr. Thaemert discussed electron microscopy and gave an example of its use on dental research.

Dr. M. D. Overholser, professor of anatomy and chairman of the department, attended the meeting of the Missouri Division of the American Cancer Society at the Missouri Hotel in Jefferson City on Oct. 15, 1960.

Internal Medicine

Dr. J. M. Martt, associate professor of medicine and Mr. Lawrence Walden, electronics technician at the Medical Center, presented an exhibit at the annual meeting of the Southern Medical Association Oct. 31 through November 3 in St. Louis, entitled the "New Technique of Cardiac Monitoring."

Dr. J. S. Sanders, instructor in medicine at the Medical Center, presented a discussion on "Medical Effects of Nuclear Weapons" at the Air Force Reserve Center in Columbia Oct. 12. Fifteen to 20 Air Force Reserve officers with training in various areas of Air Force research and development heard the talk on immediate and delayed medical effects of the atomic bombs dropped on Japan in 1945. The meeting was sponsored by the Air Force Reserve Research and Development Section.

Dr. Sanders and Dr. Martt, presented a scientific exhibit at the American Heart Association meeting in St. Louis Oct. 21 to 23. The exhibit, "Disorders of Potassium Metabolism" explained the causes, mechanisms and cardiovascular effects of abnormal potassium concentrations in the body. Over 3,000 members and guests of the American Heart Association attended.

Pathology

Dr. M. Pinson Neal, professor emeritus of pathology, attended a meeting of the consulting staff of the Ellis Fischell State Cancer Hospital on September 17, and the American Cancer Society meeting in Jefferson City on October 15. Scientific problems relating to diagnosis and treatment of malignant neoplasms were discussed at both meetings.

Pediatrics

Dr. Robert L. Jackson, professor of pediatries and chairman of the department, presented two papers at the meeting of the Iowa Chapter of the American Academy of General Practice from September 18 to 20 in Des Moines, Ia. The titles of the papers were: "Management of Children With Diabetes Mellitus," and "Nutritional Care of Infants and Children."

Psychiatry

Dr. James M. A. Weiss, associate professor of psychiatry and acting chairman of the department, gave a lecture on "Prevention of Mental Illness," at the 13th annual meeting of the Missouri Health Council in Jefferson City, September 29. Approximately 200 members of the Missouri Health Council and their guests attended.

Dr. David Davis, assistant professor of psychiatry, lectured on alcoholism at the October 9 meeting of the Alcoholics Anonymous Missouri State Convention in Columbia.

Drs. Weiss, Davis and Rodman Kabrick, assistant professor of clinical psychology, attended the meeting of the Eastern Missouri Psychiatric Society in St. Louis, October 5 to hear lectures and participate in discussion on "Aphasia."

Surgery

Dr. John A. Buesseler, chief of ophthalmology and acting chairman of the Department of Surgery, attended the 4th annual meeting of the Southern Association of Medical Schools; the Student and Academic Affairs Section September 30 to Oct. 1, in Durham-Chapel Hill, N.C. The local host for the meeting was the University of North Carolina-Duke University.

Dr. Ian Thompson, associate professor of surgery, and chief of urology, presented a paper on "Post Prostatectomy Incontinence" at the meeting of the South Central Section, American Urological Association, Sept. 25-29 in Albuquerque, New Mexico. He also served on the panel discussion, the topic being, "Pyelonephritis." Dr. Thompson acted as moderator of Urology Seminar at the Brooke Army Medical Center in San Antonio, Texas, September 16.

Dr. Warren P. Sights, assistant professor of surgery (neurosurgery), presented a talk on "Diagnosis of Brain Tumors" to the 6th Councilor District in Warrensburg, Mo., September 28 sponsored by the American Medical Association.

Surgery-Anesthesiology

Dr. Kenneth K. Keown, professor of surgery, (anesthesiology), gave a presentation of "The Preoperative Evaluation of the Cardiac Patient for Anesthesia," at the Postgraduate Course for General Practitioners and Anesthesiologists, at Vanderbilt University in Nashville, Tenn., Oct. 14. Dr. Keown also attended a meeting of the American Society of Anesthesiologists, in the capacity of First Vice President, and the American College of Anesthesiologists. He participated in the Refresher Courses, at which the topic for discussion was "Anesthesia for Intra-cardiac Surgery," in New York City, September 27 to October 7.

ST. LOUIS UNIVERSITY

Medical Alumni Homecoming

St. Louis University's first annual medical alumni homecoming was held at the University October 20 to October 22.

The medical alumni program combined scientific sessions, tours of Firmin Desloge Hospital and the Pius XII Memorial Library with dinner reunions and receptions. Classes of 1920, 1930, 1935, 1940, 1945 and 1950 were honored guests.

A scientific program entitled "Your School of Medicine's Participation in Major Medical Development" was held in Miller Hall beginning Friday morning. Dr. James W. Colbert, Jr., Dean, School of Medicine, opened the program with a welcoming address.

Members of the medical faculty who participated and their subjects were: Dr. Vallee Willman, assistant professor of surgery, Dr. J. F. Gerard Mudd, assistant professor of internal medi-

(Continued on page 1526)

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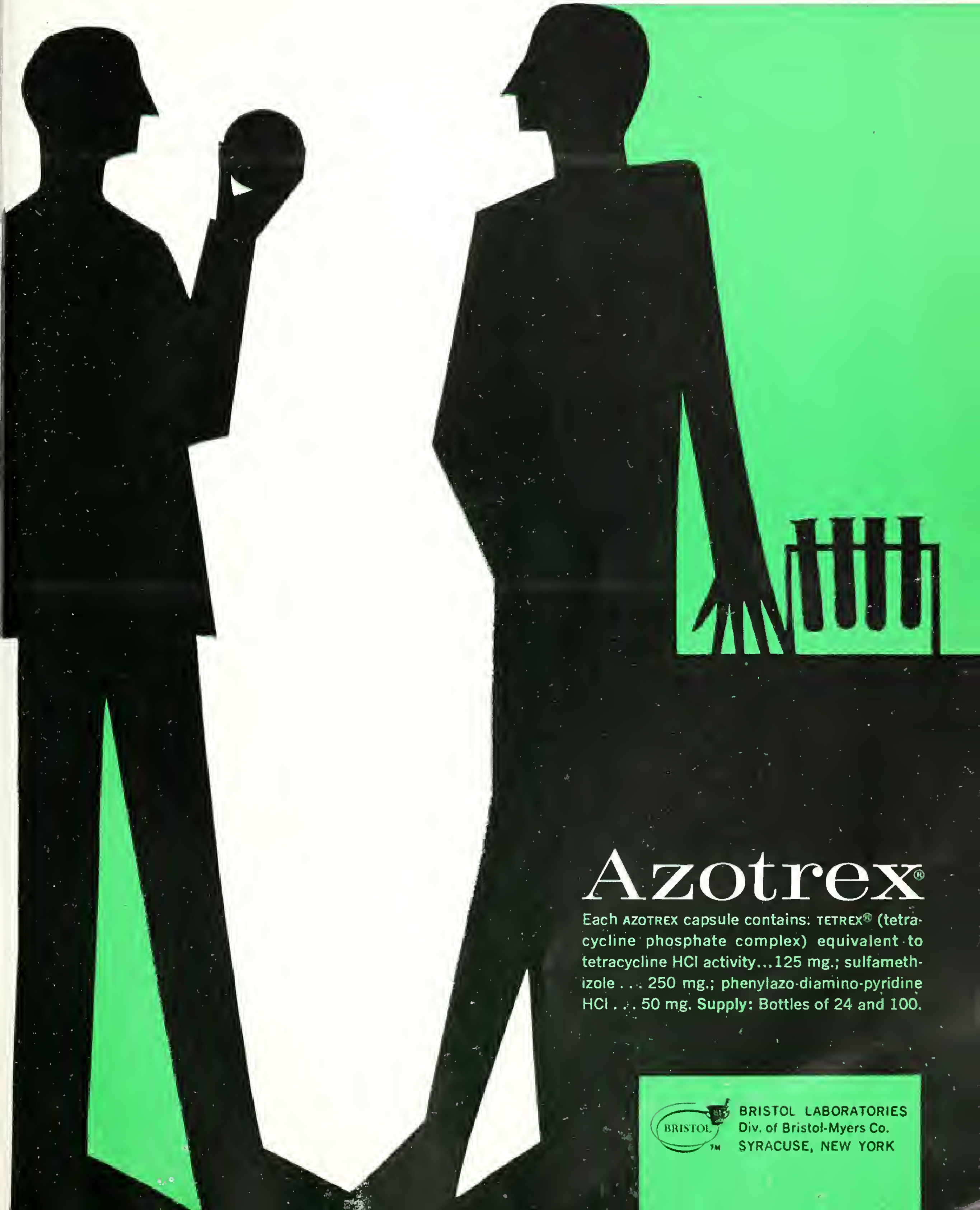

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cine, and Dr. John F. Schweiss, assistant professor of surgery, "Diagnosis and Surgical Treatment of Cardiovascular Lesions"; Dr. William H. Elliott, professor of biochemistry, and Dr. George E. Thoma, senior instructor in internal medicine, "Radiation Biology." Speakers and subjects in the afternoon program included Dr. R. Walter Schlesinger, professor of microbiology and director of the department, "Frontiers of Microbiology," and Dr. Alrick B. Hertzman, professor of physiology and director of the department, "Physiological Implications of Interplanetary Travel."

A President's reception was held for the alumni in the Pius XII Library at which time the Very Rev. Paul C. Reinert, S.J., President, greeted the medical graduates. Dean Colbert also greeted alumni at a Dean's Reception held in Miller Hall of Firmin Desloge Hospital, the School of Medicine's main teaching hospital. A luncheon for alumni wives was given at the residence of Dr. and Mrs. Colbert. An informal dinner dance for the reunion classes of 1920, 1930, 1935, 1940, 1945 and 1950 was held at the Norwood Country Club. An alumni dinner dance for all graduates of the School of Medicine was held at the Missouri Athletic Club. Father Reinert and Dean Colbert were the principal speakers at the dinner.

New Research Associates

A husband and wife from Calcutta, India, and a doctor from Tokyo, Japan, have joined the Physiology Department of the School of Medicine as researchers.

Dr. Amal Kumar Ray and his wife, Mrs. Nanda heat and cold studies in relation to the circula- India, are working on separate research projects in the physiology department. Dr. Ray, who was awarded his doctor of philosophy degree from the University of Calcutta is studying metabolism in hamsters under the direction of Dr. Pietro Bramante, assistant professor of physiology.

Mrs. Ray, who received her veterinarian degree from the University of Calcutta is studying heat and cold studies in relation to the Circulatory system under the direction of Dr. Alrick B. Hertzman, director of the department of physiology. Dr. and Mrs. Ray eventually hope to return to India to teach.

Dr. Kiyoshi Seki of Tokyo, Japan, is studying peripheral circulation under Dr. Hertzman. Dr. Seki was awarded his doctor of medicine degree from the University of Tokyo in 1941 and since 1947 has been an instructor in the department of internal medicine there.

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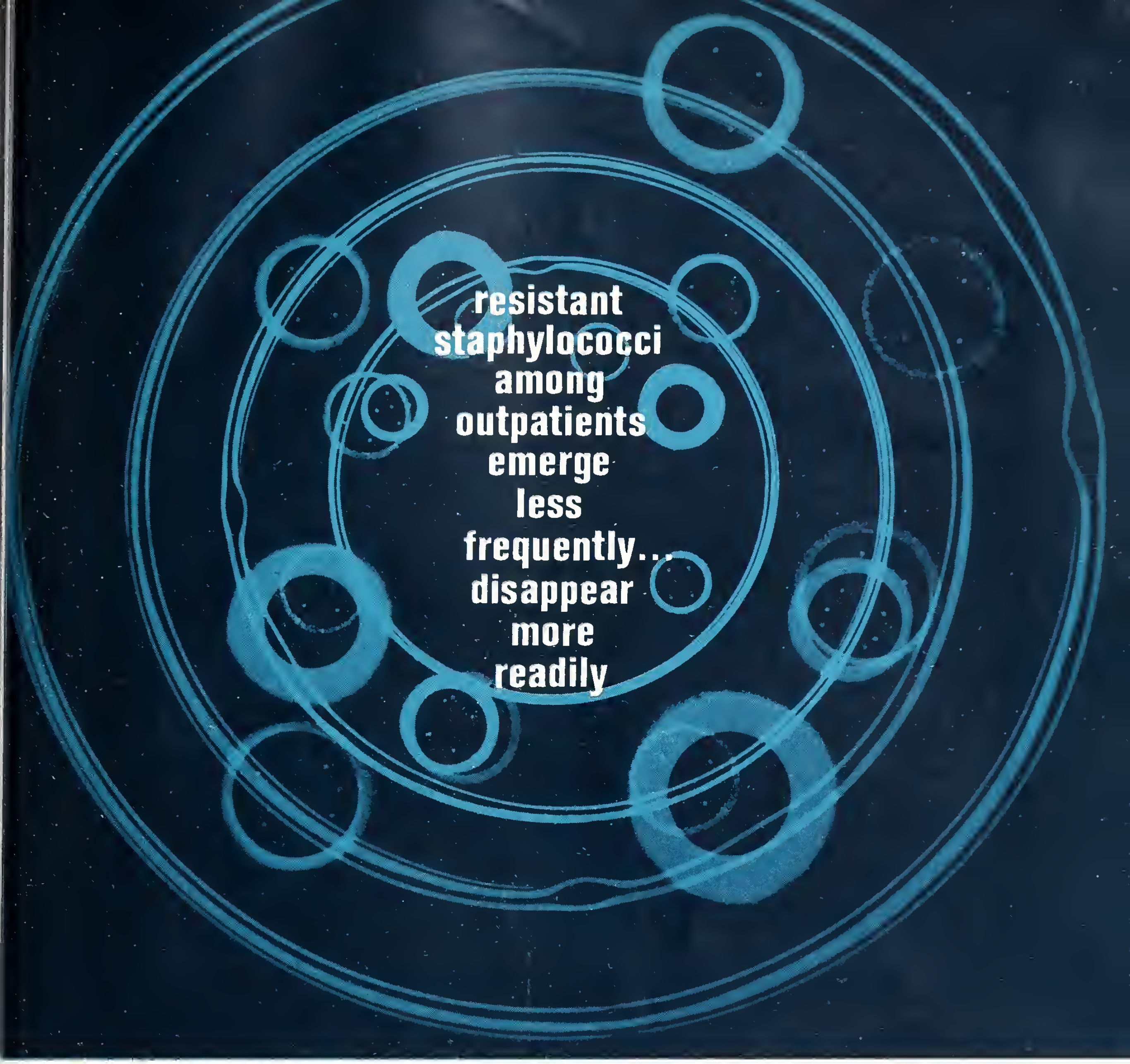

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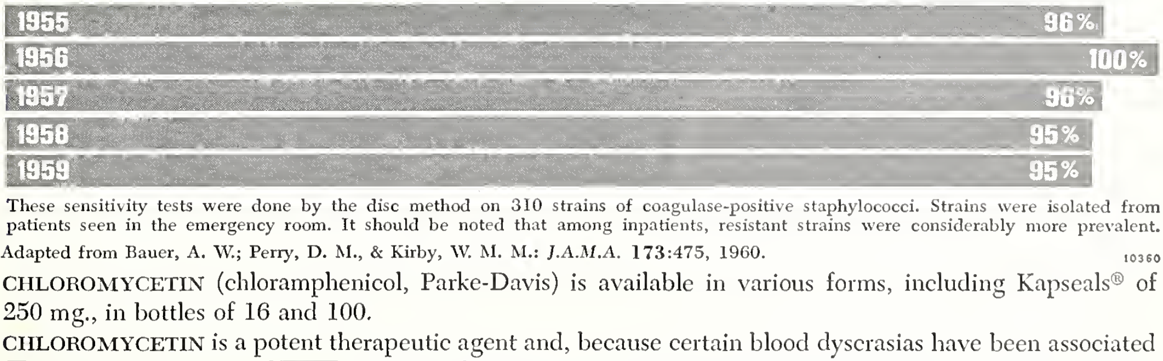

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*Adapted from Bauer, A. W.; Perry, D. M., & Kirby, W. M. M.: *J.A.M.A.* 173:475, 1960.

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Meetings

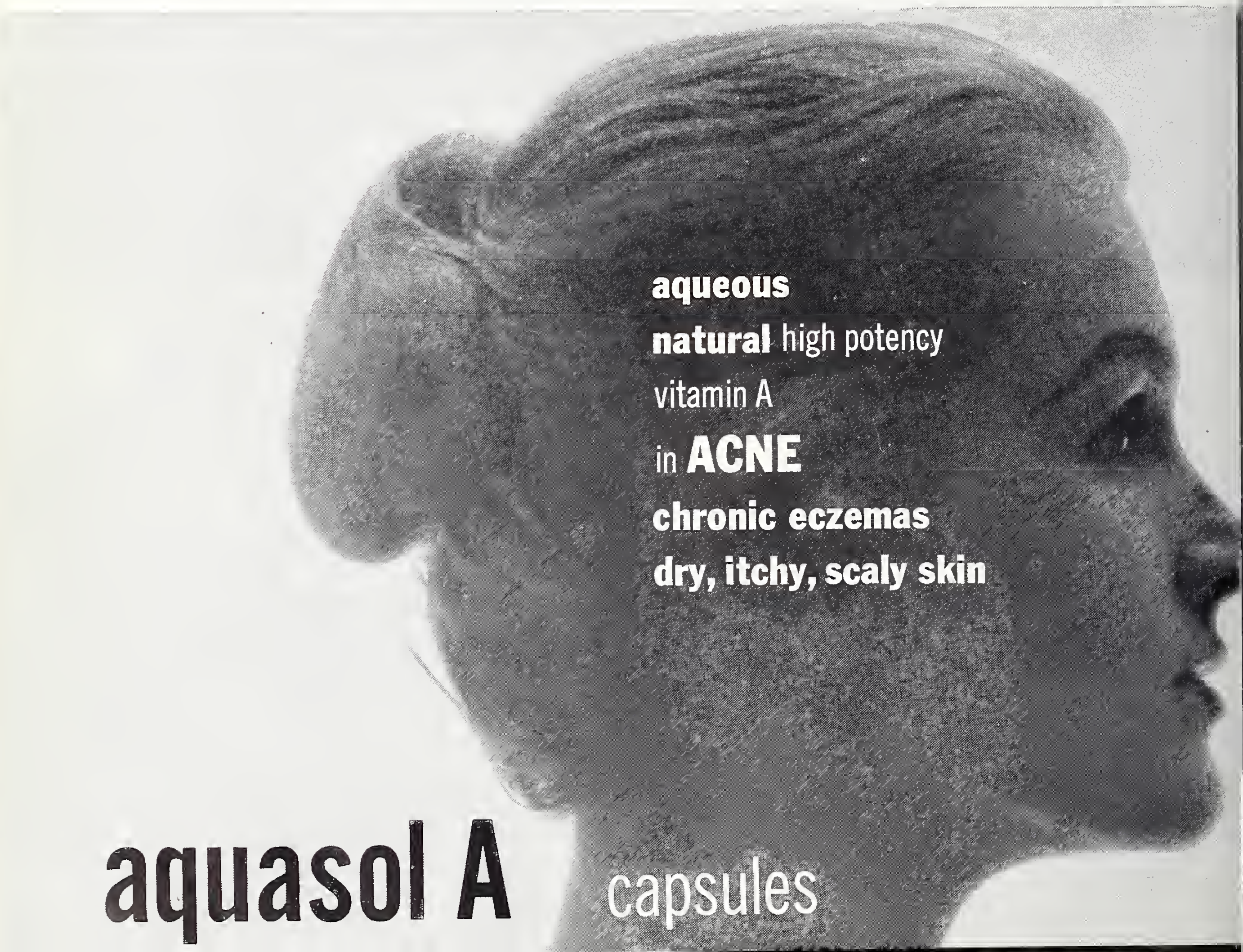
Dr. Vallee L. Willman, assistant professor of surgery, and Dr. C. Rollins Hanlon, director of the department of surgery, presented a paper entitled "Effect of Temperature on Ventricular Function in the Dog With Complete Heart Block" in the Cardiovascular Surgery Section of the American Heart Association meeting. Dr. Hanlon also moderated a panel on surgical aspects before a symposium on "Ventricular Septal Defects."

Dr. Edmund A. Smolik, associate professor of neurosurgery, presented a paper on "The Hidden Blood Loss in Neurosurgical Procedures as Determined by Radioisotopes" at a meeting of the Pan-Pacific Surgical Association in Hawaii.

Faculty Death

Dr. Leslie D. Cassidy, assistant professor of clinical medicine at the School of Medicine, died of a sarcoma in DePaul Hospital October 24. Dr. Cassidy, a member of the School of Medicine faculty for 23 years, specialized in gastroenterology. He was associate physician at the St. Mary's Group of Hospitals for 19 years, and was on the executive committee at DePaul Hospital, where he had also served as chairman of the staff. Dr. Cassidy was honored this year as a lay affiliate of the Congregation of the Mission founded by St. Vincent de Paul. Other hospital affiliations included consultant in gastroenterology at Veterans Hospital and consultant in internal medicine at Scott Air Force Base. A native of Macon, Georgia, Dr. Cassidy was awarded his bachelor of science degree from Spring Hill College at Mobile, Alabama, and was awarded his Doctor of Medicine Degree from the University in 1920. He took his internship at St. Luke's Hospital and his residency at Mullanphy Hospital. He was a diplomate of the American Board of Internal Medicine, a Fellow of the American College of Physicians and a member of Alpha Omega Alpha, honorary medical fraternity. He was a member of the Missouri State Medical Association, Southern Medical Association and former vice president of the St. Louis Medical Society.

Dr. Cassidy founded the Catholic Physicians Guild and served as its national treasurer. He aided in the formation of a free clinic for the poor in the Missouri lead belt at Old Mines, Mo., in 1953. St. Louis physicians alternate in providing medical service in this area by staffing a



clinic, which was established in the basement of a church.

During World War II, he was chief of medical service at the Army's 70th General Hospital, the St. Louis University Unit, and served in Africa and Italy. He held the rank of Lieutenant Colonel and in recognition of his military service received the Legion of Merit.

He is survived by his wife, a son, Leslie Dennis Cassidy, Jr., three daughters, Nona, Carol and Mrs. Michael C. Sansone, and a brother, Michael, of Macon, Ga.

WASHINGTON UNIVERSITY

Awards, New Officers

New officers were elected and five students given awards for excellence in scholarship at the October meeting of the Washington University Medical Society. Dr. Sol Sherry, professor of medicine, was named president of the society. Others elected to office were Dr. F. Edmund Hunter, Jr., professor of pharmacology, vice-president, and Dr. Lillian Recant, associate professor of medicine and of preventive medicine, secretary.

The undergraduates receiving scholarship awards were: David Danoff, Baltimore, Md., the Roche Award of a watch and scroll for outstanding scholarship during the first two years of Medical School; W. Bradford DeLong, Evanston, Ill., the Alumni Scholarship Award of $200 for general excellence in work during the preceding year; Leonard Jarett, Lubbock, Tex., the McCordock Book Prize for excellence in pathology; Joseph Loewnstein, Port Arthur, Tex., the George F. Gill and Kehar S. Chouke prizes for superior work in anatomy during his freshman year, and David Nelson, Detroit, Mich., the Biochemistry Prize for excellence in that field.

Elected to the Medical Society council were Dr. Adolph Cohen, assistant professor of anatomy; Dr. Robert Crane, associate professor of biological chemistry; Dr. Mark Stewart, resident in psychiatry, and Dr. James M. Stokes, assistant professor of surgery. Dr. Paul Lacy, assistant professor of pathology, discussed "Electron Microscopic and Fluorescent Antibody Studies on Islet Cell Tumors." The work was done in collaboration with Dr. J. R. Williamson, co-chief resident in pathology. "Hormonal Control of Protein Synthesis in Striated Muscle" was reported by Dr. Eric Reiss, assistant professor of medicine and of preventive medicine. This work was done with Dr. David Kipnis, assistant pro-

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1. Davidson, D. D. and Sobel, A. E.: J. Invest. Derm. 12:221, 1949.

fessor in biochemistry in medicine. Dr. Richard A. Weaver, instructor in neurology, discussed "The Function of the Fusimotor Nerve System in Man." Associating in the work were Dr. William M. Landau, assistant professor of neurology, and Dr. Thomas Hornbein, clinical fellow in anesthesiology.

Grants

Washington University School of Medicine has been awarded $165,499 in new research grants by the United States Public Health Service, Dean Edward W. Dempsey has announced. Largest grant of $33,180 was awarded Dr. John S. Spratt, Jr., instructor and trainee in surgery, and Dr. Lauren V. Ackerman, professor of pathology and of surgical pathology. Drs. Spratt and Ackerman will study the life history of patients with benign tumors and patients with cancer in an attempt to establish definite data on the relationship of these two lesions.

A $19,341 grant awarded Dr. William Blake Moore, research assistant professor of biochemistry in psychiatry and neurology, will support a comparison study of various proteins in normal and diseased body tissue.

Dr. Jack Davies, professor of anatomy, has received $13,800 for an investigation of the hormonal interrelationships of the pituitary, ovary and placenta in the mammalian fetus to determine the reason for the suppression of ovluation in pregnancy. The chemical content of mammalian ova is being investigated by Dr. Adolph I. Cohen, assistant professor of anatomy, with an $8,740 grant. Dr. Cohen will also study the relationships between this chemical content and such factors as the nutritive state of the mother, maternal age and heredity.

Dr. Alexander R. Margulis, associate professor of radiology, has been granted $7,744 to evaluate a new simplified method of studying the digestive tract through the utilization of movies. A motion study of the digestive tract, made possible by the use of barium, would shorten the examination and result in more accurate diagnosis.

Dr. Harry C. Morgan, instructor in orthopedic surgery, and Dr. Warren G. Stamp, assistant professor of orthopedic surgery, have been awarded $7,670 to investigate the effectiveness of various antibiotic agents in establishing early and complete control of infections occurring within joints before the crippling late permanent damage develops.

A $2,256 grant to Dr. James H. Satterfield, research instructor in psychiatry, will support a comparison study of brain function in normal and schizophrenic patients.

Dr. Robert M. O'Neal, associate professor of pathology, has been awarded $45,570 to purchase new equipment to enable more detailed analyses of the relation of various changes in the blood to myocardial infarcts.

Dr. F. Edmund Hunter, Jr., professor of pharmacology, has received $20,515 for purchase of new equipment for a current investigation on the biochemical function of mitochondria.

Additional funds of $6,683 awarded Dr. Helen T. Graham, professor emeritus and lecturer in pharmacology, will further support her current study of the metabolism of histamine.

Honored

Four former heads of departments at Washington University School of Medicine were honored for their work during the 1910 Medical School reorganization at an informal dinner meeting in the University Club. The honorees were Dr. Joseph Erlanger, Dr. Eugene L. Opie, Dr. Philip Shaffer and Dr. Robert Terry, who headed the departments of physiology, pathology and bacteriology, chemistry and anatomy, respectively. Dr. Erlanger, now professor emeritus of physiology, attended the dinner. Dr. Terry, professor emeritus of anatomy, is living in Weston, Mass. Dr. Shaffer is distinguished service professor emeritus and lecturer in biological chemistry at the Medical School, and Dr. Opie is with the Rockefeller Institute in New York City. The four honorees are the living members of the executive faculty of 1910.

Lecturer

Dr. Howard Ulfelder, clinical professor of gynecology at Harvard School of Medicine, lectured to members of the house staff and was a guest of the Department of Obstetrics and Gynecology in October. Dr. Ulfelder is chief of staff at Vincent's Memorial Hospital and Chief of Gynecology at Massachusetts General Hospital, both in Boston. While in St. Louis he also discussed cancer of the vulva at the first fall meeting of the St. Louis Gynecological Society.

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TUBERCULOSIS ABSTRACT

(Continued from page 1476)

drug is continued, clinical improvement may be anticipated. This does not apply to patients who relapse while on treatment or after treatment. These patients usually show both test-tube and clinical resistance. If the patient in relapse has not had one of the major drugs (isoniazid or streptomycin), he certainly should get it, in combination with PAS or a PAS substitute. Usually, unfortunately, the patient has had isoniazid-PAS-streptomycin prior to relapse. One reason why many patients use up their two best drugs during first treatment is the improper evaluation and handling of drug reactions. Reactions can be classified as: (a) Toxic, such as eighth nerve damage due to streptomycin or neuropathy due to isoniazid. (b) Intolerance, gastro-intestinal symptoms due to PAS. (c) Hypersensitivity, or true allergy: fever, adenitis, rashes, changes in blood, purpura, hepatitis, shock, even death.

DRUG REACTIONS

Every drug reaction should be analyzed and classified, as each type requires different handling.

Toxic reactions: reduce dose, change form, give antidote if available (B6 for isoniazid).

Intolerance: reduce dose, change form (KPAS or resins for sodium PAS), give counteracting medicine (antacids, etc.).

Hypersensitivity: Stop Drug. Desensitize. If the patient has used up his first team drugs, the second and third team drugs are left. These, alas, are not too good. Pyrazinamide is a potent drug. It is best when given in combination with isoniazid, which is already used up. It is potentially toxic to the liver (3.5 to 10 per cent in various studies), hence most physicians prefer to give it for a relatively short time—about three months, with frequent tests of liver function. If any surgery is planned, pyrazinamide is an excellent drug to "cover" the period of surgery and convalescence.

Cycloserine is not a very potent drug; used alone to treat a patient in drug-resistant relapse, it is of little value. Viomycin and terramycin have some effect, but are not very potent. Kannamycin has proved more toxic than useful. Hinconstarch, streptovaricin, and the hydrazones of isoniazid all seem to work better in reports from abroad than in patients in relapse.

Corticosteroid drugs, which can be very helpful in some selected, very sick, first treatment cases, are dangerous and should be avoided in relapse patients. If these agents are used without an effective "umbrella" of anti-tuberculosis drugs, they can cause serious spread of the tuberculosis.

We must not forget the value of old-fashioned bed rest. This unspectacular modality has helped untold thousands of patients in the past hundred years; in many cases it was the only treatment used. Bed rest, not all day but 18 to 20 hours a day, can reduce toxicity, improve resistance, and frequently allow a relapsed patient to "cool off" sufficiently, either to overcome his disease or to tolerate surgery.

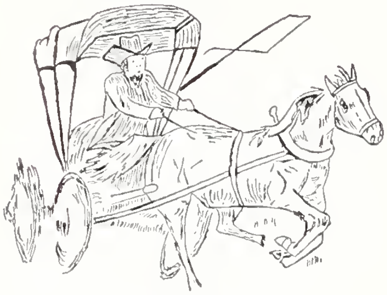
Surgery does not have to be resection. There is still a place for thoracoplasty in patients with localized upper lobe cavitation, who are poor risks for resection. Plombage is a less effective, but also less drastic, procedure and may be used as a temporary expedient.

Any surgical procedure is more dangerous when performed on a patient who is excreting drug-resistant tubercle bacilli. It takes sound and mature medical judgment to decide whether to take a calculated risk or to leave a bad situation alone.

To sum up the treatment of relapse: There is no simple formula. Practically all patients should be in a hospital. A first-line drug, not used before, should be given with either PAS or a comparable drug. Isoniazid may be given, hopefully, but may do no good. Only occasionally will very high doses of isoniazid (with 10 per cent B6) prove helpful after regular doses have become ineffective. The best combination of second and third team drugs should be used. Modified bed rest is an extremely valuable treatment. Collapse or resectional surgery is more hazardous in the presence of drug resistant tubercle bacilli, but can be carried out in selected cases. The best management of relapse is to try to prevent it by carrying out effective first treatment.

LEO H. POLLOCK, M.D.

Missouri Medicine in Review



FORTY YEARS AGO

St. Louis University, the oldest seat of learning west of the Mississippi River, has for the first time in its more than a century of endeavor made a public appeal for funds, the larger portion of which are to be applied to the support of the college of medicine and dentistry. The university has asked its alumni and friends to raise the sum of $3,000,000 as a Centennial Endowment Fund, in commemoration of the 100th anniversary of the founding of the institution. St. Louis University holds the distinction of having established in the great Louisiana Purchase tract the first colleges of medicines, dentistry, law and commerce. Its college of dentistry is the only one in Missouri of Class "A" rating.

The American Medical Association has increased the annual fellowship dues in that body from $5 to $6, effective January 1, 1921. The St. Louis Medical Society has a proposition before it to increase its dues to $15 per annum, and the Jackson County Medical Society is considering increasing its dues to $22 per annum for active members who will enjoy library privileges.

Beginning Saturday, December 11, physicians will be required to report all cases of diseases designated by the state board of health as "infectious, contagious, communicable or dangerous." This law was passed by the Fiftieth General Assembly and the board has established a system of reporting communicable diseases and issued the necessary blanks and instructions. The attending physician is held responsible for making the report to the health officer. Hitherto the board had no authority to enforce its regulations governing morbidity reports, although ordinances were effective in some of the larger cities for cases occurring within the limits of those cities.

Washington University was recently visited by the following prominent Belgian physicians: Dr. Antoine DePage, his fame as a Belgian surgeon is unquestioned and during the war he was head of the Belgian Red Cross; Dr. Jules Bordet, who recently was awarded the Nobel Prize in medicine for 1919, is known throughout the world of medicine as part discoverer of the Bordet-Gengou bacillus; Dr. René Sand, secretary of the University Fund of Belgium and the leading authority on public health measures, and Dr. Albert Dustin, professor of pathologic anatomy at the University of Brussels and a noted neurologic surgeon.

TWENTY-FIVE YEARS AGO

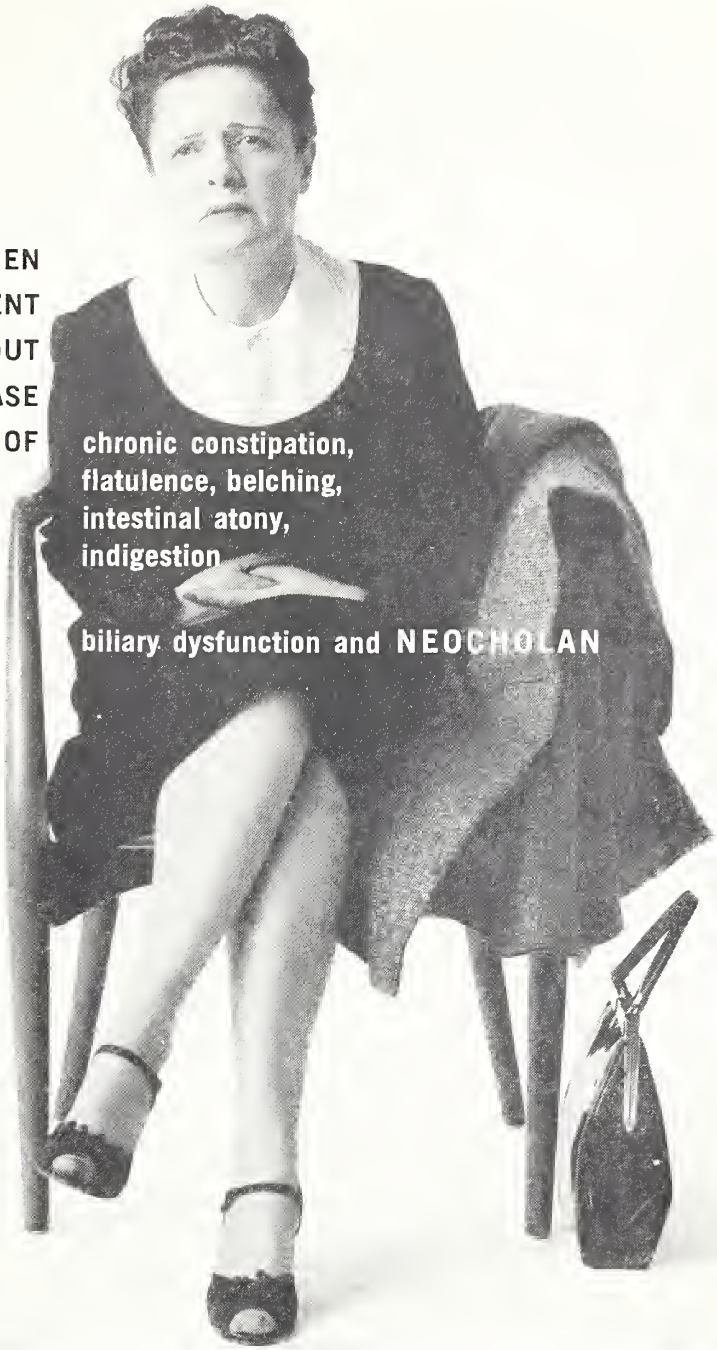
The twenty-ninth annual session of the Southern Medical Association was held in St. Louis, November 19 to 22. It was the first time Missouri has had the opportunity of entertaining the Association although Missouri has been one of its components for twenty-six years. Officers elected for next year are: President, Dr. Fred M. Hodges, Richmond, Virginia; first vice-president, Dr. Quitman U. Newell, St. Louis; second vice-president, Dr. Joseph E. Knighton, Shreveport, Louisiana; secretary, Mr. C. P. Loranz, Birmingham.

The Bothwell Memorial Hospital, Sedalia, was accorded provisional approval by the American College of Surgeons on October 14. The hospital is open to all members in good standing of the Pettis County Medical Society.

The Frisco System Medical Association held its thirty-fourth annual meeting in Joplin October 28 and 29. The President for the ensuing year is Dr. Robert Vinyard, Springfield, Missouri.

TEN YEARS AGO

The Attorney General of the United States announced an anti-trust suit had been filed against the Oregon State Medical Association, the Oregon Physicians Service, eight constituent county societies and eight Oregon physicians in October, 1948. About one year after that date the trial got under way. The federal government anti-trust division attempted to prove that the named defendants, beginning about 1936, conspired to restrain and monopolize prepaid medical care in the State of Oregon, (2) that they attempted to restrain and monopolize said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care, and (3) that they did in fact restrain and monopolize said care. Judge Claude McCullock of the Oregon federal district court heard the case and on September 28, 1950, held that none of the government's charges had been proved. The government attorneys made frequent reference to the "economic aspects" of the doctors' activities. The Judge quoted the old adage on this point "The laborer is worthy of his hire." He questioned whether supervision of fees within a profession is unlawful and stated "Barbers do it, and bricklayers, beauty operators and milk men." The Judge also questioned whether congress intended to include the professions when it enacted the Sherman anti-trust law in 1890. "In a measure, this case is an attack on the professions. Everything critical of the doctors that has been said in the case could be said of the legal profession."

The first of a series of seven sectional meetings of the American College of Surgeons will be held in St. Louis on January 22 and 23, with headquarters at the Hotel Statler.

Harold L. Gainey, M.D., Kansas City, was elected secretary-treasurer of the Central Association of Obstetricians and Gynecologists at a meeting on September 21 in Milwaukee.

Evarts A. Graham, M.D., St. Louis, was elected to the board of regents of the American College of Surgeons at a meeting on October 26. Cyrus E. Burford, M.D., St. Louis, and J. Albert Key, M.D., St. Louis, were elected to the board of governors for a three year term.

The following 1950 initiates from Missouri were received by the American College of Surgeons at a meeting in October: Drs. Joseph N. Dills, C. E. Lockhart and Joseph G. Siceluff, Springfield; Robert H. Young, Moberly; William H. Duncan, Albert N. Lemoine, Albert N. Lemoine, Jr., Joseph H. Printz, Johnson Underwood, Jr. and Vincent T. Williams, Kansas City; Eugene T. Dmytryk, Minot P. Fryer, Carl J. Heifetz, Jules H. Kopp, Joseph H. Ogura, Francis X. Paletta, Henry J. Ringo, Bernard L. Sinner, Hugh R. Smith and Stephen M. Tapper, St. Louis.

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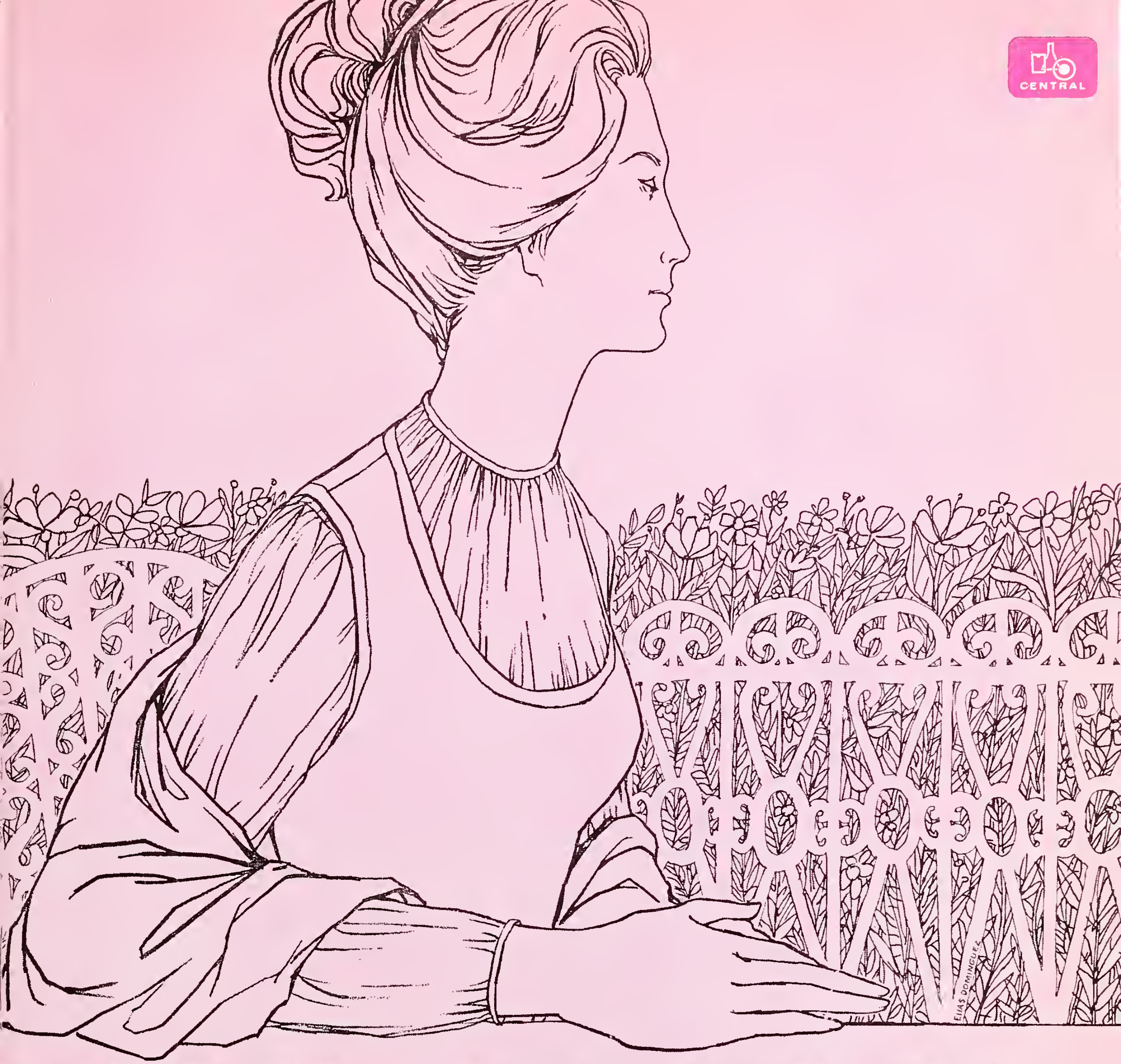

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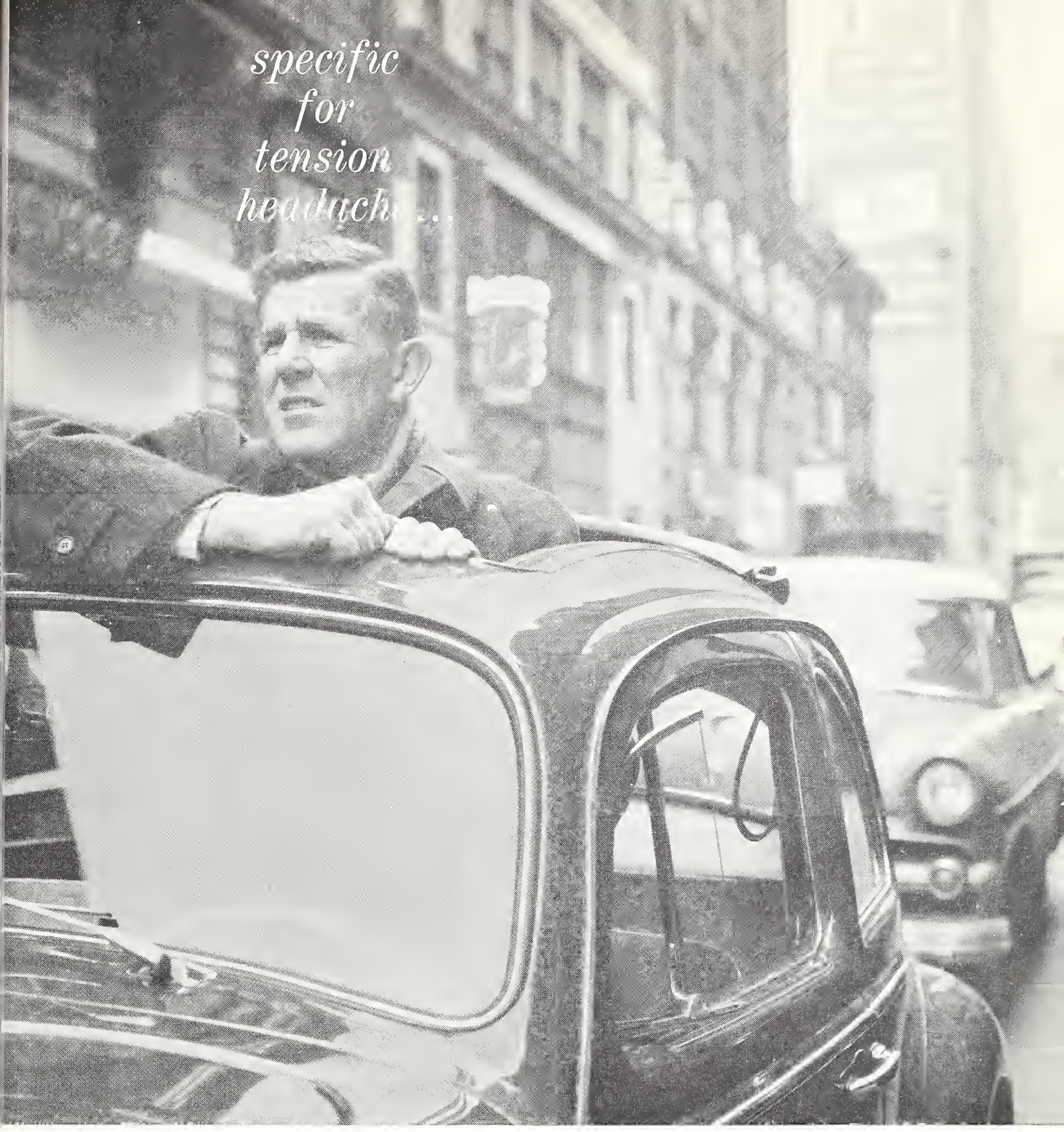

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